An Analysis of Title Insurance Data

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Summary of the Report

Texas, along with other states where the government sets title insurance rates, has significantly higher prices than states that allow more competition. On a per-policy basis, Texas's decision to set prices and restrict innovation adds from $292 (in 2001 dollars) to $1,663 (in 2016 dollars) in costs for the average purchaser of title insurance policies of $1 million dollars or less.

The higher costs in Texas apply to all title charges, as well as to subsets such as lender's title insurance, lender's title insurance plus endorsement, and simultaneous owner's and lender's title insurance. These higher prices are being paid by Texas consumers and businesses because price competition essentially ceases to exist when the state sets, i.e., promulgates, title insurance rates. Texas' mandate of comprehensive service coverage in its premium (versus only risk premium being required in some other states) does not account for the higher costs in Texas. Our analysis indicates that the promulgation of rates in Texas is a strong determinant that explains the state's higher title-related charges.

By requiring the promulgation of title rates, Texas transfers wealth from property owners directly to title agents and title underwriters, with no additional value to the property owners. The system functions as a 'reverse Robin Hood transfer.'

It is unclear why the Texas Legislature requires the Texas Department of Insurance (TDI) to set rates for title policies when it allows competition in all other lines of insurance. The promulgation of title rates provides no known benefits to Texas property owners; it is just an additional cost for title insurance in Texas reflecting the absence of price competition that makes it more expensive and difficult for Texans to purchase land or properties. While it benefits the title insurance industry, there is no benefit to consumers who fare much better in nearly every other state.

Our analysis seeks to explain different title-related charges among 50 states and the District of Columbia, based on three independent databases, including a national HUD-1 settlement cost database created by the U.S. Department of Housing and Urban Development in 2001, a set of closing-cost quotations from a Bank of America website collected in 2016, and a set of Stewart Title cost quotations, computed twice from Stewart Title websites, once in 2010 and once in 2016.

Our estimates in this study are based on a validated and robust methodology for determining the cost imposed on all Texas corporations or persons who purchase property resulting from Texas' lack of competition in the title insurance sector. While it is difficult to estimate exactly how much higher title insurance costs are in Texas because the state sets title insurance rates, it is possible to compute a lower bound for the total amount of additional money paid to title agents and underwriters. There are two ways of doing so. In both cases, the promulgated rate is significant; it is the best explanatory variable for the difference between what property owners in Texas pay versus owner in states that do not mandate a lower bound for title insurance costs.

One estimate of the lower bound of the cost to consumers is based on the 2001 HUD-1 data. The total title charges per policy in a state with promulgated rates was on average $292 higher than the per

policy total title charges in a state with no active price regulation, expressed in 2001 dollars and not including inflation from 2001 to 2016.

The second estimate of the lower bound of the cost to consumers is based on the 2016 data. Overall, several variables—regulation type, service coverage, loan amount and states' characteristics—can explain between 35 percent and 71 percent of the variance in title charges. The best estimate available from this study for the additional cost for an average property purchaser for a lender's title insurance policy due solely to the promulgation of title insurance rates is $1,663 per promulgated policy, expressed in 2016 dollars.

Over the decades the Texas Legislature has created supplemental title charges that agents and underwriters can impose on property owners, even though the supplemental charges are in excess of the mandated rates. Supplemental charges further increase title costs to Texas property owners as all supplemental title charges raise title costs above and beyond the mandated Texas title rates. The 2013 cost to Texas property purchasers from the Texas Legislature's authorization of supplemental endorsements was $40,891,270, expressed in 2013 dollars.

This study did not try to estimate the differences between Texas and the other states for mortgages over $1 million, and there are many such mortgages, particularly in commercial real estate transactions. Texas' excess title charges increase as the value of the mortgage increases, so the additional cost of promulgation for mortgages over $1 million would increase the total above the calculations presented here.

The conclusions of this report rely on three independent databases noted above covering all 50 states and the District of Columbia. The results using each of the three independent databases are consistent. The title charges of interest (the dependent variables) in these three databases include total title charge, premium plus endorsement, lender's (mortgagee's) title insurance plus endorsement, lender's title insurance, and simultaneous owner's and lender's title insurance. Based on these three independent databases, this report evaluates four sets of potential explanatory variables (independent variables) to explain why title charges vary among the states: loan amount; types of premium regulation; number and type of title premium service coverage; and state characteristics. The results are summarized above and explained in detail in the following sections of this report.

Findings

This report seeks to explain different title-related charges among 50 states and the District of Columbia, based on three independent databases, including a national HUD-1 settlement cost database created by the U.S. Department of Housing and Urban Development in 2001, a set of closing-cost quotations from a Bank of America website collected in 2016, and a set of Stewart Title cost quotations, computed twice from Stewart Title websites, once in 2010 and once in 2016 (see Table S-1).

The title charges of interest (the dependent variables) in these three databases include total title charge, premium plus endorsement, lender's (mortgagee's) title insurance plus endorsement, lender's title insurance, and simultaneous owner's and lender's title insurance. Based on these three independent databases, this report evaluates four sets of potential explanatory variables (independent variables) to explain why title charges vary among the states: loan amount; types of premium regulation; number and type of title premium service coverage; and state characteristics.

The results using three independent databases are consistent. The analysis indicates that "regulation type" is a strong determinant that explains different-title related charges across the states. States with promulgated rates, such as Texas, have significantly higher title costs (versus states without any price regulation) related to a long list of variables: total title charges; lender's title insurance; lender's title insurance plus endorsement; and simultaneous owner's and lender's title insurance. An explanation is that when Texas authorizes a state promulgated title rate, that charge represents a fixed minimum title rate floor for title insurance charges. Regulation decreases the level of competition and leads to higher title charges. The complexity of title services (comprehensive service coverage versus only risk premium) does not help explain diverse title costs. Title related charges are positively associated with loan amount or property value; the higher the loan amount or property value, the higher the expected value of title insurance. Total title related charges and premiums plus endorsements are also positively associated with median house price in each state. The significant independent variables-regulation type, service coverage, loan amount and states' characteristics-can explain between 35 percent and 71 percent of the variance in title charges, depending on the data source and different title related charges across all states.

This study provides a validated and robust methodology for computing the incremental costs that Texas' title regulation imposes on all Texas persons or corporations that purchase property by its refusal to permit competition in the title insurance sector. When the Texas Department of Insurance (TDI) sets title rates, it imposes charges on all person who own property in Texas; these excess payments flow directly to title agents and title underwriters, with no apparent benefit to Texas' property owners. Neither the Texas Legislature nor the TDI have ever sought to justify or provide any evidence why the state promulgates title insurance rates or refuses to allow competition in title insurance rates. No one involved in the system – not title agents, not title underwriters or even the title trade association - have ever provided evidence to justify TDI's promulgated rates set through occasional title insurance rate hearings conducted by the TDI. Title insurance functions as a 'reverse Robin Hood transfer,' as it takes money from Texas citizens who have purchased property and transfers it to title insurance agents and underwriters.

It is possible to compute a lower bound for the amount of money transferred from property owners to title agents and underwriters based on the 2016 data. The best estimate available from this study for the incremental cost for an average property purchaser for a lender's title insurance policy due solely to the Texas rate setting rule is $1,663 per average lender title policy, i.e., for a title insurance policy for the mortgage lender's risk.

Over the decades Texas has created supplemental title charges that agents and underwriters can impose on property owners, even though the supplemental charges are in excess of the mandated rates; those supplemental charges increase title costs to Texas property owners. Not one of these supplemental fees has ever been justified on any risk or cost basis by the Texas title industry. Table 5 lists the premiums, number of policies issued in 2013 and total costs of each regulated title-related endorsement in Texas; all these costs are above and beyond the mandated Texas title charges. The 2013 cost to Texas property purchasers from the Texas Legislature's authorization of supplemental endorsements was $40,891,270, expressed in 2013 dollars.

The authors of this study have found no explanation in rules or regulations why Texas would set a lower limit on title prices, when it allows competition in all other lines of insurance. Promulgation of title rates provides no known benefits to Texas property owners; it is an incremental cost for title insurance in Texas reflecting the absence of any cost competition. Texas' refusal to permit competition

in title insurance makes it more difficult for Texans to purchase land or properties, by adding expected incremental charge of $1,663 per lender's title policy. Neither is it clear why Texas compels property owners to pay supplemental title fees over and above the mandated minimum rates with no documented cost/risk justification. The $40.9 million dollars (in 2013 dollars) is an unjustified transfer to title agents and underwriters from Texans buying property.

As indicated above, this study used three independent sources of data from title-related charges. The data from a 2001 national HUD-1 settlement cost database is old, but the data are representative of closing costs based on a random sample of real HUD-1 settlement forms from all 50 states and the District of Columbia. Title costs among states are comparable – apples to apples - because each cost component is identified exactly on its HUD-1 forms, including title agent and underwriter fees, for all service: title examination/search; title preparation; underwriting premium; or property closing, as well as any supplemental title charges.

The analysis based on the 2001 study using HUD-1 database shows that regulation type is the independent variable that best explains different title related charges across the states. The states with promulgated rate, such as Texas, have significantly higher total title charges and premiums plus endorsements costs. The total title charges in a state with promulgated rates was on average $292 higher than the total title charges in a state with no active regulation, both expressed in 2001 dollars. The title plus endorsements cost in a state with the regulation type of "promulgated rates" is $479 higher than the average premiums plus endorsement in a state without any active regulation, both expressed in 2001 dollars. Using HUD-1 database, the regulation types, service coverage, loan amount and states' characteristics can explain 35 percent and 39 percent of the variance in total title charges and premiums plus endorsements separately.

The 2001 results indicate a lower marginal impact per average lender policy, $479 per lender policy in 2001 dollars versus $1,663 in 2016 dollars. The promulgated rate is significant, in both 2001 and 2016 analysis; it is the best explanatory variable for the difference between what property owners in Texas pay versus owner in states that do not mandate a lower bound for title insurance costs.

Methodology

This section discusses the multiple linear regression models that provide evidence and results. The analysis seeks to explain the variability of title insurance charges in the U.S. based on four sets of potential independent variables: loan amount; premium regulation type; title premium service coverage; and state characteristics. The analysis seeks to explain five dependent variables (all related to expected title insurance charges) from three independent databases. The paper evaluates a series of hypotheses to assess why these five title-related charges vary among states; it seeks to explain the different prices of title related charges among all states. The factor that best explains the variation in title insurance in the 50 states and the District of Columbia is the types of regulation policy of each state. There are five different regulation types in the U.S., including (1) no active regulation, (2) file and use, (3) use and file, (4) prior approval, and (5) promulgated rates. There are four services coverage, including (1) risk premium only; (2) risk premium and examination; (3) risk premium, search and examination; and (4) comprehensive; it takes risk premium only as the baseline. Equation 1 is a multiple regression model formulated to explain the variability of title insurance charges.

$$Y_i = \alpha + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + \varepsilon_i \qquad (1)$$

In the equation Y is the dependent variable. This report uses five alternate dependent variables,

including total title insurance, premiums plus endorsements, lender's title insurance plus endorsements, lender's title insurance and simultaneous title insurance. The X_i variables are independent explanatory variables: X_1 represents loan amount; X_2 represents four dummy variables indicating five premium regulation types; it takes no active regulation as the baseline; X_3 represents three dummy variables indicating four degrees of title premium service coverage (it takes premiums only as the baseline); X_4 represents state characteristics, including median income and median house price; ε is the error term. In order to correct the potential problem of heteroskedasticity and correlation between error terms and independent variables, this report calculates robust and state cluster standard errors.

Title insurance quotations from Stewart Title's Rate Calculator website provides the most detailed data about lender's title insurance 2016 costs (see https://www.stewartratecalculator.com/. The dependent variable "lender's title insurance" from Stewart's database is the most appropriate of dependent variables, reflecting the most widely used title insurance category, lender's title insurance. Data were collected for five loan amount values: $200,000, $400,000, $600,000, $800,000 and $1,000,000 for year 2016.

The following interpretation of regression results is based on the dependent variable "lender's title insurance" from the Stewart database and the full suite of independent variables. The regression results show that "promulgated rates" as compared to lender's title insurance under no active price regulation are significantly higher on average, holding all else constant. The coefficient of the "promulgated rate" describes the marginal costs for a lender's title insurance for a citizen in a state with the regulation type of "promulgated rates," as compared to that of a citizen in a state without any active regulation. The regression results from Stewart's database show that the expected value of lender's title insurance in a state with the regulation type of "promulgated rates" is $1,663 higher than the expected value of lender's title insurance in a state without any active regulation. This can be interpreted as an average the lender's title insurance in a state under the regulation type of "promulgated rates" is $1,663 higher than the lender's title insurance in a state without any active regulation, and that result is statistically significant.

The significance of this result is reflected in the p-value of "promulgated rates," or p is less than 0.00001, which indicates strong evidence against the null hypothesis that the lender's title insurance in a state with the regulation type of "promulgated rates" is the same as the lender's title insurance in a state without any active regulation. Usually with a p-value of less than 0.01, the inference would be that the coefficient (1,662.5 in Table S-2, at the intersection of promulgated rates and lender's title insurance) is significantly different from zero. A p-value of less than 0.00001 means that the likelihood that such a result could occur due to random data collection of the underlying information alone is much less than 1 in 100,000 for the null hypothesis: [H_0: a lender's title insurance in a state with the regulation type of "promulgated rates" is the same as the lender's title insurance in a state without any active regulation]. The null hypothesis should be rejected because the marginal impact of promulgation is a significant difference.

Table S-1: Sources of Three Independent Databases

Sources	Year	Loan Amount
HUD-1	2001	Less than $250,000
BOA	2016	$200,000
	2016	$400,000
Stewart	2010	$400,000
		$600,000
	2016	$200,000
		$400,000
		$600,000
		$800,000
		$1,000,000

Table S-2: Summary of Regression Results

	(1) Total title charge	(2) Premium plus endorsement	(3) Lender's plus endorsement	(4) Lender's title insurance	(5) Simultaneous title insurance
Loan Amount	0.00198***	0.00168***			
	(0.000261)	(0.000250)			
Loan Amount Square	-0.0000081**	-0.000005***			
	(0.000001)	(0.0000011)			
Loan amount is $400,000			526.1***	529.3***	600.2***
			(33.97)	(35.50)	(69.45)
Loan amount is $600,000				1045.1***	1192.7***
				(68.10)	(77.15)
Loan amount is $800,000				1500.2***	1764.9***
				(96.64)	(109.2)
Loan amount is $1,000,000				1952.5***	2325.4***
				(126.5)	(145.3)
File and use	-110.6	43.07	28.32	-144.1	-100.2
	(70.66)	(50.72)	(251.9)	(191.6)	(248.1)
Use and file	-163.7*	120.0*	29.61	-27.32	-231.5
	(82.81)	(60.94)	(205.9)	(262.3)	(303.7)
Prior approval	25.22	-36.15	162.0	356.3	-59.95
	(111.4)	(138.2)	(210.2)	(275.7)	(308.3)
Promulgated Rates	291.7*	479.3***	828.5***	1662.5***	1079.2**
	(146.4)	(78.68)	(246.6)	(359.6)	(500.1)
Examination & premium	-94.40	124.4***	-231.4	814.5***	1248.3***
	(91.06)	(42.21)	(207.0)	(182.9)	(233.3)
Examination, search & premium	11.50	200.2**	70.97	-50.57	670.9
	(89.40)	(95.00)	(108.4)	(161.9)	(481.1)
Comprehensive	28.66	23.15	189.1	24.82	-124.8
	(124.8)	(101.7)	(146.7)	(189.8)	(201.9)
Median income	-0.000795	0.00565	-0.00828	-0.00765	-0.00766
	(0.00526)	(0.00510)	(0.00703)	(0.00814)	(0.0106)
Median house price	0.00585***	0.00199**	0.00126	0.00172*	0.00166
	(0.00108)	(0.000962)	(0.000989)	(0.00103)	(0.00154)
Constant	361.9**	-126.2	836.0**	625.6	1069.4*
	(178.8)	(156.5)	(372.3)	(425.0)	(535.3)
R^2	0.354	0.387	0.446	0.712	0.659
Observations	9288	9288	102	225	245
Data Source	HUD-1 database	HUD-1 database	Bank of America	Stewart	Stewart

Robust and state cluster standard errors in parentheses; * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

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Abstract

This report seeks to explain different title-related charges among 50 states and the District of Columbia, based on three independent databases, including a national HUD-1 settlement cost database created by the U.S. Department of Housing and Urban Development in 2001, a set of closing-cost quotations from a Bank of America website collected in 2016, and a set of Stewart Title cost quotations, computed twice from Stewart Title websites, once in 2010 and once in 2016.

The title charges of interest (the dependent variables) in these three databases include total title charge, premium plus endorsement, lender's (mortgagee's) title insurance plus endorsement, lender's title insurance, and simultaneous owner's and lender's title insurance. Based on these three independent databases, this report evaluates four sets of potential explanatory variables (independent variables) to explain why title charges vary among the states: loan amount; types of premium regulation; number and type of title premium service coverage; and state characteristics.

The results using three independent databases are consistent. The analysis indicates that "regulation type" is a strong determinant that explains different-title related charges across the states. States with promulgated rates, such as Texas, have significantly higher title costs (versus states without any regulation) related to a long list of variables: total title charges; lender's title insurance; lender's title insurance plus endorsement; and simultaneous owner's and lender's title insurance. An explanation is that when the Texas Legislature promulgates a state title rate, that charge represents a fixed minimum title rate floor for title insurance charges. Regulation decreases the level of competition and leads to higher title charges. The complexity of title services (comprehensive service coverage versus only risk premium) does not help explain diverse title costs. Title related charges are positively associated with loan amount or property value; the higher the loan amount or property value, the higher the expected value of title insurance. Total title related charges and premiums plus endorsements are also positively associated with median house price in each state. The significant independent variables-regulation type, service coverage, loan amount and states' characteristics-can explain between 35 percent and 71 percent of the variance in title charges, depending on the data source and different title related charges across all states. The best current (2016) estimate available from this study for the incremental cost for an average property purchaser for a lender's title insurance policy due solely to the Texas Legislature's rate setting rule is $1,663 per average lender title policy, for a title insurance policy for the mortgage lender's risk.

This study provides a validated and robust methodology for computing the incremental costs that Texas Legislature imposes on all Texas persons or corporations that purchase property by its refusal to permit competition in the title insurance sector. By requiring the Texas Department of Insurance (TDI) to set title rates, the Texas Legislature imposes charges on all person who own property in Texas; these excess payments flow directly to title agents and title underwriters, with no apparent benefit to Texas' property owners. The Texas Legislature has never sought to justify or provide any evidence why it mandates promulgated title insurance rates or refuses to allow competition in title insurance rates. No one involved in the system – not title agents, not title underwriters or even the title trade association - have never provided evidence to justify promulgated rate in the occasional title insurance rate hearing

conducted by the TDI. Title insurance functions as a 'reverse Robin Hood transfer,' as it takes money from Texas citizens who have purchased property and transfers it to title insurance agents and underwriters.

Why does the Texas Legislature mandate minimum rates for title policies, when it allows competition in all other lines of insurance? Promulgation of title rates provides no known benefits to Texas property owners; it is an incremental cost for title insurance in Texas reflecting the absence of any cost competition. The Legislature's refusal to permit competition in title insurance makes it more difficult for Texans to purchase land or properties, by adding expected incidental charge of $1,663 per lender's title policy. Why does the Texas Legislature compel Texas property owners to pay supplemental title fees over and above the mandated minimum rates with no justification in terms of costs or risks? The $40.9 million (in 2013 dollars) is another unjustified transfer to title agents and underwriters from Texans buying property.

Methodology

This section discusses the multiple linear regression models that provide evidence and results. The analysis seeks to explain the variability of title insurance charges in the U.S. based on four sets of potential independent variables: loan amount; premium regulation type; title premium service coverage; and state characteristics. The analysis seeks to explain five dependent variables (all related to expected title insurance charges) from three independent databases. The paper evaluates a series of hypotheses to assess why these five title-related charges vary among states; it seeks to explain the different prices of title related charges among all states. The factor that best explains the variation in title insurance in the 50 states and the District of Columbia is the types of regulation policy of each state. There are five different regulation types in the U.S., including (1) no active regulation, (2) file and use, (3) use and file, (4) prior approval, and (5) promulgated rates. There are four services coverage, including (1) risk premium only; (2) risk premium and examination; (3) risk premium, search and examination; and (4) comprehensive; it takes risk premium only as the baseline. Equation 1 is a multiple regression model formulated to explain the variability of title insurance charges.

$$Y_i = \alpha + \beta_1 X_{i1} + \beta_2 X_{i2} + \beta_3 X_{i3} + \beta_4 X_{i4} + \varepsilon_i \qquad (1)$$

In the equation Y is the dependent variable. This report uses five alternate dependent variables, including total title insurance, premiums plus endorsements, lender's title insurance plus endorsements, lender's title insurance and simultaneous title insurance. The X_i variables are independent explanatory variables: X_1 represents loan amount; X_2 represents four dummy variables indicating five premium regulation types; it takes no active regulation as the baseline; X_3 represents three dummy variables indicating four degrees of title premium service coverage (it takes premiums only as the baseline); X_4 represents state characteristics, including median income and median house price; ε is the error term. In order to correct the potential problem of heteroskedasticity and correlation between error terms and independent variables, this report calculates robust and state cluster standard errors.

Title insurance quotations from Stewart Title's Rate Calculator website provides the most detailed data about lender's title insurance 2016 costs (see https://www.stewartratecalculator.com/. The dependent variable "lender's title insurance" from Stewart's database is the most appropriate of dependent

variables, reflecting the most widely used title insurance category, lender's title insurance. Data were collected for five loan amount values: $200,000, $400,000, $600,000, $800,000 and $1,000,000 for year 2016.

The following interpretation of regression results is based on the dependent variable "lender's title insurance" from the Stewart database and the full suite of independent variables. The regression results show that "promulgated rates" as compared to lender's title insurance under no active regulation the lender's title insurance costs are significantly higher on average, holding all else constant. The coefficient of the "promulgated rate" describes the marginal costs for a lender's title insurance for a citizen in a state with the regulation type of "promulgated rates," as compared to that of a citizen in a state without any active regulation. The regression results from Stewart's database show that the expected value of lender's title insurance in a state with the regulation type of "promulgated rates" is $1,663 higher than the expected value of lender's title insurance in a state without any active regulation. This can be interpreted as an average the lender's title insurance in a state under the regulation type of "promulgated rates" is $1,663 higher than the lender's title insurance in a state without any active regulation, and that result is statistically significant.

The significance of this result is reflected in the p-value of "promulgated rates," or 0.000, which indicates strong evidence against the null hypothesis that the lender's title insurance in a state with the regulation type of "promulgated rates" is the same as the lender's title insurance in a state without any active regulation. A p-value of 0.000 means that the likelihood that such a result could occur due to random data collection of the underlying information alone is much less than 1 in 1000 for the null hypothesis: [H_0: a lender's title insurance in a state with the regulation type of "promulgated rates" is the same as the lender's title insurance in a state without any active regulation]. The null hypothesis should be rejected because the marginal impact of promulgation is a significant difference.

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Introduction

This report seeks to explain different title-related charges among 50 states and the District of Columbia based on three independent databases, including the national HUD-1 settlement cost database created by the U.S. Department of House and Urban Development in 2001, Bank of America closing cost quotations from its website in 2016, and title cost quotations computed from a Stewart website in 2010 and 2016. Table 1 lists the sources of all these databases. The HUD-1 database contains 9,314 observations from 50 states and the District of Columbia. HUD designed the sampling process to select among eligible FHA transactions randomly with equal probability within each state. The weight is the inverse probability of being included in the final sample, which is also provided by the HUD-1 database. The closing cost quotations on Bank of America website (BOA) come from "closing costs calculator" of Bank of American. The BOA website lists title insurance related fees, such as closing/escrow fee, owner's title insurance, lender's title insurance and title insurance endorsement for two different purchase prices ($200,000 purchase price and $400,000 purchase price). The title insurance quotations from Stewart Title's Rate Calculator website (https://www.stewartratecalculator.com/) provides quotations of owner's policy, lender's policy, simultaneous owner's title insurance and simultaneous lender's title insurance for five loan amount values: $200,000, $400,000, $600,000, $800,000 and $1,000,000 for years 2010 and 2016.

Based on these three independent databases, this report evaluates a series of hypotheses to assess why title-related charges vary among states; it seeks to explain the different prices of title related charges among all states. Four sets of potential independent variables are tested in the report: loan amount; types of premium regulation types; title premium service coverage; and state characteristics. The expected impact of loan amount on title related charges is positive: a higher property value is associated with a higher mortgage and title charge increase with a larger mortgage. Regulation types vary in their influence. Some analysts might expect strict state regulations to force title insurance prices down. However, strict regulation through rate promulgation may limit competition and result in higher title insurance prices. The expected impact of a comprehensive set of services on title-related charges could be positive, if more services covered (title search; title examination; insurance underwriting and settlement conference) by the title insurance premium lead to higher costs. A state's expected house price and income level could be positively related with title charges, as expensive property value in a state could force up title costs due to a set of larger mortgages.

The results using three independent databases are consistent (see Table 2). These results show that the ""type" of regulation is the independent variable that best explains different title related charges across the states. States with promulgated rates, such as Texas, have significantly higher title costs related to a long list of variables: total title charges; lender's title insurance; lender's title insurance plus endorsement; and simultaneous owner's and lender's title insurance than states without any

regulation. Consider model 5 in Table 2 as an example. The coefficient of "promulgated rate" means that the expected value of title insurance costs in a state with the regulation type of "promulgated rates" is $1,079.20 higher than the expected value of title insurance costs in a state without any active regulation. A possible explanation is that state promulgation of minimum title rates set a floor in title insurance; regulation decreases the level of competition and leads to high costs. Therefore, higher title-related charges in Texas can be explained partially by promulgated rate regulation. The complexity of title services (comprehensive service coverage versus fewer services) does not help explain diverse title costs: total title charges; lender's title insurance; lender's title insurance plus endorsement; and simultaneous lender's and owner's title insurances. For example, Texas' comprehensive services covered by Texas' premiums do not explain the high premiums in Texas, as compared with fewer title services in other states. Title related charges are positively associated with loan amount or property value; the higher the loan amount or property value, the higher the expected value of title insurance. Total title related charges and premiums plus endorsements are also positively associated with median house price in each state.

The coefficient of promulgation describes the marginal costs of title-related charges for a citizen in a state with the regulation type of "promulgated rates" compared to that of a citizen in a state without any active regulation. The overall impact of regulation should consider both the number of title insurance transactions and the marginal cost of title-related charges under promulgation. As a lender's title insurance or its equivalent is required by most if not all mortgage issuing institutions in all U.S. states and the owner's title insurance is optional for customers, this report uses the lender's title insurance costs to analyze the overall impact of promulgation. The regression result of model 4 in Table 1 shows estimates of lender's title insurance. The coefficient of "promulgated rate" means that the expected value of lender's title insurance in a state with the regulation type of "promulgated rates" is $1,663 higher than the expected value of lender's title insurance in a state without any active regulation. Based on the number of T2 loan policies (lender's title policy based on mortgage), Table A1 in the Appendix A illustrates the impact of regulation on lender's title insurance for each county in Texas. Table A1 in effect represents the Texas' Legislature's reverse Robin Hood charges: Texas's Legislature's insistence on promulgated rates for title insurance coerces Texas property owners to pay more than would be the case under any other type of regulation.

This study provides a validated and robust methodology for computing the cost of a reverse Robin Hood charge to Texas' property owners compelled by the Texas Legislature's unjustified refusal to allow any cost-competition in Texas for promulgated title insurance rates. The best estimate available from this study for the incremental cost for an average property purchaser for title insurance due solely to promulgation is $1,663 per average lender's title policy. For three reasons this number is probably a gross underestimate of the excess charge on property owners' title is transferred directly to the title industry, including both title agents and title policy underwriters. First, this study only estimates or calculates title rate of property for which data were available: mortgage

that range from $200,000 to $1,000,000. In effect, the study examines only some residential property in Texas; it does not examine all residential property, as some homes have mortgages over $1 million. If commercial title insurance were included, with mortgage values far in excess of $1 million per property, the incremental cost imposed by promulgation on Texas' property owners would be greater than $1,663 per mortgage. Second, the $1,663 value is computed based on lender's policy only, title charges for mortgage holders, which represents only a modest fraction of the title policies in Texas. If the hidden excess charge of promulgation were computed for all title policies in Texas, not just mortgage title policies of Texas lenders, the total transfer of money from property purchasers to the title industry would be much larger. It is beyond the scope of the study to estimate the total incremental costs to Texas's property owners from the Texas Legislature's promulgated rates including all property purchasers and all title polices sold in Texas. Third, the Texas Legislature has authorized Texas' title industry to create novel supplemental title fees above and beyond the mandated rates. Table 5 lists the premiums for regulated and unregulated title-related endorsements in Texas. Based on 2013 TDI data on endorsements, the Texas Legislature's creation of supplemental title insurance endorsements costs Texas property owners $40.9 million in fees that are transferred to title agents and underwriters. The $40.9 million in transfer to the title industry for supplemental so-called 'voluntary' endorsements are in addition to the mandated title rates. It would be interesting to ask both the title industry in Texas and the Texas Legislature how they justify the transferred funds from Texas' property owners to title agents and underwriters that provide no benefits to Texas' housing consumers and for what there is no factual justification.

The regulation types, service coverage, loan amount and states' characteristics can explain between 35 percent and 71 percent of the variance in title charges, depending on the data source and different title related charges across all states. It would be interesting to assess whether a number of variables, such as characteristics of title companies, buyers or sellers, might influence different title-related charges. Unfortunately, no such database is available.

Table I-1: Sources of Three Independent Databases

Sources	Year	Loan Amount
HUD-1	2001	Less than $250,000
BOA	2016	$200,000
	2016	$400,000
Stewart	2010	$400,000
		$600,000
	2016	$200,000
		$400,000
		$600,000
		$800,000
		$1,000,000

Table I-2: Summary of Regression Results

	(1) Total title charge	(2) Premium plus endorsement	(3) Lender's plus endorsement	(4) Lender's title insurance	(5) Simultaneous title insurance
Loan Amount	0.00198***	0.00168***			
	(0.000261)	(0.000250)			
Loan Amount Square	-0.0000081***	-0.000005***			
	(0.000001)	(0.0000011)			
Loan amount is $400,000			526.1***	529.3***	600.2***
			(33.97)	(35.50)	(69.45)
Loan amount is $600,000				1045.1***	1192.7***
				(68.10)	(77.15)
Loan amount is $800,000				1500.2***	1764.9***
				(96.64)	(109.2)
Loan amount is $1,000,000				1952.5***	2325.4***
				(126.5)	(145.3)
File and use	-110.6	43.07	28.32	-144.1	-100.2
	(70.66)	(50.72)	(251.9)	(191.6)	(248.1)
Use and file	-163.7*	120.0*	29.61	-27.32	-231.5
	(82.81)	(60.94)	(205.9)	(262.3)	(303.7)
Prior approval	25.22	-36.15	162.0	356.3	-59.95
	(111.4)	(138.2)	(210.2)	(275.7)	(308.3)
Promulgated Rates	291.7*	479.3***	828.5***	1662.5***	1079.2**
	(146.4)	(78.68)	(246.6)	(359.6)	(500.1)
Examination & premium	-94.40	124.4***	-231.4	814.5***	1248.3***
	(91.06)	(42.21)	(207.0)	(182.9)	(233.3)
Examination, search & premium	11.50	200.2**	70.97	-50.57	670.9
	(89.40)	(95.00)	(108.4)	(161.9)	(481.1)
Comprehensive	28.66	23.15	189.1	24.82	-124.8
	(124.8)	(101.7)	(146.7)	(189.8)	(201.9)
Median income	-0.000795	0.00565	-0.00828	-0.00765	-0.00766

	(0.00526)	(0.00510)	(0.00703)	(0.00814)	(0.0106)
Median house price	0.00585***	0.00199**	0.00126	0.00172*	0.00166
	(0.00108)	(0.000962)	(0.000989)	(0.00103)	(0.00154)
Constant	361.9**	-126.2	836.0**	625.6	1069.4*
	(178.8)	(156.5)	(372.3)	(425.0)	(535.3)
R^2	0.354	0.387	0.446	0.712	0.659
Observations	9288	9288	102	225	245
Data Source	HUD-1 database	HUD-1 database	Bank of America	Stewart	Stewart

Robust and state cluster standard errors in parentheses
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table I-3: Title policies issued 2009-2013

Policy Type and Code	Policy Rate Rule Reference	Policy Category	2013 Total Policies Issued	2012 Total Policies Issued	2011 Total Policies Issued	2010 Total Policies Issued	2009 Total Policies Issued
5000 - Lender Insured Closing Service (T-50)	No Charge	Closing Service Codes	-	-	-	-	-
900 - Correction of Policy Amount (T-3)	No Charge	Endorsements which affect amount of Liability stated in policy	45	35	143	75	53
920 - Down Date of Construction Loan Policy (T-3)	R-11c	Endorsements which affect amount of Liability stated in policy	3,866	4,733	4,176	6,852	5,879
940 - Down Date of Owner's Policy During Construction (T-3)	R-15b	Endorsements which affect amount of Liability stated in policy	447	1,218	285	349	249
960 - Owner Policy Increased Value Endorsement (T-34)	R-15a	Endorsements which affect amount of Liability stated in policy	14	26	22	30	23
100 - Down Date of Interim Construction Loan Binder (T-3)	R-11c	Endorsements which do not affect amount of Liability stated in policy	1,033	683	602	6,070	10,267
140 - Variable Rate Mortgage Endorsement (T-33)	R-11d	Endorsements which do not affect amount of Liability stated in policy	16,296	22,090	19,871	22,893	12,920
141 - Variable Rate Mortgage Endorsement for which there is no Charge	R-11d	Endorsements which do not affect amount of Liability stated in policy	442	153	108	98	36
142 - Variable Rate Mortgage – Negative Amortization Endorsement (T-33.1)	R-11d	Endorsements which do not affect amount of Liability stated in policy	928	720	2,066	3,172	1,380
143 - Variable Rate Mortgage – Negative Amortization Endorsement for which there is no Charge	R-11d	Endorsements which do not affect amount of Liability stated in policy	26	474	202	112	20
150 - Manufactured Housing (T-31)	R-11e	Endorsements which do not affect amount of Liability stated in policy	2,045	2,599	2,376	4,046	3,514
151 - Supplemental Coverage Manufactured Housing Unit Endorsement for Loan Policy (T-31.1)	R-11e	Endorsements which do not affect amount of Liability stated in policy	1,259	1,904	1,832	3,191	3,183
152 - Supplemental Coverage Manufactured Housing Unit Endorsement for Owner's Policy (T-31.1)	R-15	Endorsements which do not affect amount of Liability stated in policy	162	317	214	542	565
211 - Assignment of Mortgage (T-3)	R-11a	Endorsements which do not affect amount of Liability stated in policy	197	271	269	303	433
311 - Partial Release, Modification, etc. (T-38)	R-11b	Endorsements which do not affect amount of Liability stated in policy	2,543	4,583	4,084	5,341	3,206
400 - Correction - Other than Policy Amount (T-3)	No Charge	Endorsements which do not affect amount of Liability stated in policy	2,082	2,213	2,363	2,957	3,377

411 - Balloon Mortgage Endorsement, Issued at same as Policy (T-39)	R-11h	Endorsements which do not affect amount of Liability stated in policy	2,036	2,607	2,412	3,035	2,365
412 - Balloon Mortgage Endorsement, Issued subsequent to Policy (T-39)	R-11h	Endorsements which do not affect amount of Liability stated in policy	77	185	110	238	132
500 - Amendment of Survey Exception for T-1 (T-3 or deletion)	R-16(1)	Endorsements which do not affect amount of Liability stated in policy	6,911	9,567	9,154	17,929	13,938
501 - Amendment of Survey Exception for T-1R (T-3 or deletion)	R-16(2)	Endorsements which do not affect amount of Liability stated in policy	32,594	55,329	36,499	51,921	22,734
550 - Completion of Improvements (T-3)	No Charge	Endorsements which do not affect amount of Liability stated in policy	24	980	159	185	12,117
600 - U.S.A. Policy Acquisition of Title (T-12)	R-17	Endorsements which do not affect amount of Liability stated in policy	25	35	29	16	21
700 - Amendment of Tax Exception (T-30, T-3 or deletion)	R-19	Endorsements which do not affect amount of Liability stated in policy	239,254	331,590	240,285	385,564	297,548
710 - Not Yet Due and Payable Tax Amendment	R-24	Endorsements which do not affect amount of Liability stated in policy	230,602	286,319	221,641	334,172	244,209
800 - Future Advance/Revolving Credit (T-35)	R-11f	Endorsements which do not affect amount of Liability stated in policy	1,604	1,841	1,870	2,163	1,836
801 - Minerals and Surface Damage Endorsement (T-19.2) for Owner's Policy on land which is for one-to-four family residential use of less than one acre or office, industrial, retail, mixed use retail/residential or multifamily purposes	R-29.1A	Endorsements which do not affect amount of Liability stated in policy	6,698	18,336	18,717	17,691	26
802 - Minerals and Surface Damage Endorsement (T-19.2) for Loan Policy on land which is for one-to-four family residential use of less than one acre or office, industrial, retail, mixed use retail/residential or multifamily purposes	R-29.1A	Endorsements which do not affect amount of Liability stated in policy	79,298	79,714	91,822	83,493	213
803 - Minerals and Surface Damage Endorsement (T-19.3) for Owner's Policy on land which is not for one-to-four family residential use of less than one acre or office, industrial, retail, mixed use retail/residential or multifamily purposes	R-29.1B	Endorsements which do not affect amount of Liability stated in policy	769	1,254	1,670	1,575	8
804 - Minerals and Surface Damage Endorsement (T-19.3) for Loan Policy on land which is not for one-to-four family residential use of less than one acre or office, industrial, retail, mixed use retail/residential or multifamily purposes	R-29.1B	Endorsements which do not affect amount of Liability stated in policy	4,148	3,714	5,657	6,322	33
805 - Non-Imputation Endorsement (Mezzanine Financing) (T-24.1)	R-31	Endorsements which do not affect amount of Liability stated in policy	134	94	12	-	-

806 - Contiguity Endorsement (T-25.1)	R-32	Endorsements which do not affect amount of Liability stated in policy	1	28	5	-	-
810 - EPL Endorsement (T-36)	R-11g	Endorsements which do not affect amount of Liability stated in policy	312,842	364,117	293,893	412,606	335,406
820 - Leasehold Owner's Policy Endorsement (T-4)	No Charge	Endorsements which do not affect amount of Liability stated in policy	95	113	99	126	128
821 - Residential Leasehold Endorsement (T-4R)	No Charge	Endorsements which do not affect amount of Liability stated in policy	98	93	85	194	51
822 - Leasehold Loan Policy Endorsement (T-5)	No Charge	Endorsements which do not affect amount of Liability stated in policy	175	90	151	198	138
850 - Limited Pre-Foreclosure Policy Down Date Endorsement (T-99)	R-26	Endorsements which do not affect amount of Liability stated in policy	7	8	52	27	28
875 - Equity Loan Mortgage Endorsement (T-42)	R-28A	Endorsements which do not affect amount of Liability stated in policy	29,063	36,734	32,155	43,530	39,852
876 - Supplemental Coverage Equity Loan Mortgage Endorsement (T-42.1)	R-28B	Endorsements which do not affect amount of Liability stated in policy	25,484	30,623	26,086	39,732	33,787
877 - Texas Reverse Mortgage Endorsement (T-43)	No Charge	Endorsements which do not affect amount of Liability stated in policy	1,466	1,715	1,904	2,315	1,287
878 - Limited Coverage Junior Loan Home Equity Line of Credit/ Variable Rate (T-46)	R-27d	Endorsements which do not affect amount of Liability stated in policy	81	152	170	206	178
879 - Limited Coverage Junior Loan Down Date (T-45)	R-27c	Endorsements which do not affect amount of Liability stated in policy	57	100	168	223	175
880 - Limited Coverage Junior Loan Additional Coverage (T-3)	R-27b	Endorsements which do not affect amount of Liability stated in policy	5	18	9	26	27
881 - First Loss Endorsement (T-14)	R-11i	Endorsements which do not affect amount of Liability stated in policy	1,076	1,417	1,586	1,395	599
883 - Loan Policy Aggregation Endorsement (T-16)	R-11j	Endorsements which do not affect amount of Liability stated in policy	846	1,988	944	2,667	337
884 - Planned Unit Development Endorsement (T-17)	R-11k	Endorsements which do not affect amount of Liability stated in policy	159,019	193,556	147,709	203,174	154,766
885 - Restrictions, Encroachments, Minerals Endorsement on residential real property (T-19)	R-29A	Endorsements which do not affect amount of Liability stated in policy	274,174	342,594	277,766	372,900	299,017
886 - Restrictions, Encroachments, Minerals Endorsement on land which is not residential real property (T-19)	R-29B	Endorsements which do not affect amount of Liability stated in policy	27,242	12,634	10,149	16,397	7,359
887 - Planned Unit Development Endorsement (T-17) issued on two or more policies issued simultaneously on the same land	R-11k	Endorsements which do not affect amount of Liability stated in policy	224	2,624	5,841	2,244	1,246
888 - Condominium Endorsement (T-28)	R-11l	Endorsements which do not affect amount of Liability stated in policy	4,714	3,605	2,138	2,334	1,281

889 - Restrictions, Encroachments, Minerals Endorsement - Owner's Policy (T-19.1) on land which is not residential property and no amendment of exception to area and boundaries is made	R-29D(1)	Endorsements which do not affect amount of Liability stated in policy	1,286	3,615	3,841	1,867	1,287
890 - Access Endorsement (T-23)	R-30	Endorsements which do not affect amount of Liability stated in policy	6,853	8,527	5,455	5,645	2,593
891 - Non-Imputation Endorsement (T-24)	R-31	Endorsements which do not affect amount of Liability stated in policy	184	152	135	464	74
892 - Contiguity Endorsement (T-25)	R-32	Endorsements which do not affect amount of Liability stated in policy	1,504	1,769	1,450	1,293	497
893 - Additional Insured Endorsement (T-26)	R-33	Endorsements which do not affect amount of Liability stated in policy	52	76	59	65	96
894 - Assignment of Rents/Leases (T-27)	R-34	Endorsements which do not affect amount of Liability stated in policy	1,651	1,161	725	640	218
895 - Restrictions, Encroachments, Minerals Endorsement - Owner's Policy (T-19.1) on land which is not residential property and an amendment of exception to area and boundaries is made	R-29D(2)	Endorsements which do not affect amount of Liability stated in policy	2,468	3,012	1,891	9,895	236
896 - Co-Insurance Endorsement (T-48)	No Charge	Endorsements which do not affect amount of Liability stated in policy	40	3	42	10	1
897 - Restrictions, Encroachments, Minerals Endorsement - Owner's Policy (T-19.1) on land which is residential property and no amendment of exception to area and boundaries is made	R-29C(1)	Endorsements which do not affect amount of Liability stated in policy	1,007	1,194	1,043	687	2
898 - Restrictions, Encroachments, Minerals Endorsement - Owner's Policy (T-19.1) on land which is residential and an amendment of exception to area and boundaries is made	R-29C(2)	Endorsements which do not affect amount of Liability stated in policy	26,063	24,517	20,801	10,973	5
8020 - Loan Title Policy Binder on Interim Construction Loan	R-13	Interim Construction Loan Binder Transaction	14,479	13,444	12,367	16,850	12,141
8021 - Extension Endorsement	R-13	Interim Construction Loan Binder Transaction	441	2,834	1,438	2,968	4,647
30 - Subsequent to Interim Construction Loan Binder	R-13B(1)	Loan Policy	23	36	36	25	56
3000 - Single issue	R-1	Loan Policy	123,434	159,973	141,315	136,839	100,303
3001 - Single Issue (Previously issued variable rate mortgagee or loan policy)	R-4	Loan Policy	-	2	-	-	-
3005 - Single Issue Pay-As-You-Go	R-2a	Loan Policy	9	15	17	18	19

3010 - Single Issue Construction Loan	R-1	Loan Policy	867	1,230	888	1,162	1,029
3011 - Single Issue Refinance of Construction Loan	R-18	Loan Policy	4,120	3,775	4,377	5,229	4,636
3200 - First Lien Policy – Simultaneous with Subordinate Lien Policy(ies)	R-7	Loan Policy	628	893	1,179	1,167	1,023
3210 - Simultaneous with Owner's Policy	R-5a	Loan Policy	239,469	225,476	212,079	272,863	253,647
3215 - Simultaneous with Owner's Policy Pay-As-You-Go	R-5e	Loan Policy	9	17	10	24	15
3220 - Simultaneous with First Lien Policy	R-7	Loan Policy	481	630	1,168	1,541	2,495
3230 - Subsequent to Owner's Policy Excepting to Lien	R-6a	Loan Policy	4	7	6	7	8
3240 - Subsequent to Loan Policy	R-6b	Loan Policy	21	304	404	480	230
3241 - Insolvent Insurer Replacement Policy	R-6c	Loan Policy	-	2	2	-	-
3250 - Simultaneous with Owner's Policy when Loan Policy Exceeds Owner's	R-5b	Loan Policy	24,231	24,329	24,990	32,128	24,571
3255 - Simultaneous with Owner's that Exceeds Loan (Pay-As-You-Go)	R-5e	Loan Policy	4	44	27	8	6
3280 - Simultaneous with Owner's with Credit for Previous Owner's Policy or Policies	R-5c, R-5d	Loan Policy	1,321	1,387	1,520	1,218	1,202
3290 - Simultaneous with Owner's Following Construction in excess of $5,000,000	R-20	Loan Policy	101	100	129	1,789	93
3295 - Limited Pre-Foreclosure Policy (T-98)	R-26	Loan Policy	-	9	9	11	32
3297 - Limited Coverage Junior Loan Policy (T-44)	R-27a	Loan Policy	-	4	2	-	3
3300 - Leasehold (Single Issue)	R-1	Loan Policy	59	119	67	98	124
3305 - Leasehold Pay-As-You-Go (Single Issue)	R-2a	Loan Policy	1	1	1	3	-
3320 - Leasehold (Simultaneous Issue)	R-5a	Loan Policy	42	191	102	166	338
3325 - Leasehold Pay-As-You-Go (Simultaneous Issue)	R-5e	Loan Policy	-	-	1	-	-
3340 - Leasehold (Simultaneous Issue) Loan Exceeds Owner's	R-5b	Loan Policy	3	9	4	5	4

3345 - Leasehold Pay-As-You-Go Simultaneous with Owner's that Exceeds Loan	R-5e	Loan Policy	4	42	-	-	1
4001 - Refinance of Loan within One Year	R-8a	Loan Policy	16,871	19,904	15,999	27,756	20,617
4002 - Refinance of Loan within Two Years	R-8a	Loan Policy	23,524	24,969	18,743	27,151	37,196
4003 - Refinance of Loan within Three Years	R-8b	Loan Policy	26,612	30,210	24,774	28,682	32,135
4004 - Refinance of Loan within Four Years	R-8c	Loan Policy	30,569	27,758	22,018	23,087	21,022
4005 - Refinance of Loan within Five Years	R-8d	Loan Policy	27,431	20,523	18,002	16,543	16,090
4006 - Refinance of Loan within Six Years	R-8e	Loan Policy	29,273	15,099	14,834	14,680	16,458
4007 - Refinance of Loan within Seven Years	R-8f	Loan Policy	18,873	12,908	12,775	15,882	15,529
6000 - Texas Limited Coverage Residential Chain of Title Policy Combined Schedule (T-53)	R-35	Loan Policy	5,117	11,657	4,624	-	-
1000 - Single Issue	R-1	Owner's Policy	130,191	138,756	134,786	154,231	108,476
1001 - Single Owner's Policy for Separate Purchases	R-3b	Owner's Policy	2,283	129	111	147	61
1002 - Single Owner's Policy for Separate Purchases Simultaneous with Loan Policy	R-3b	Owner's Policy	122	161	126	212	111
1005 - Single Issue Pay-As-You-Go	R-2c	Owner's Policy	5	20	19	3,998	1,233
1100 - Single Issue with Subsequent Improvements or Multiple Owner's Policies surrendered with Single Issue with Subsequent Improvements	R-3a	Owner's Policy	425	226	152	181	807
1190 - Single Issue Following Construction in excess of $5,000,000	R-20	Owner's Policy	37	46	57	79	81
1200 - Simultaneous with Loan Policy	R-5a	Owner's Policy	235,611	234,528	213,838	275,782	246,278
1201 - Simultaneous with Loan that Exceeds Owner's	R-5b	Owner's Policy	23,996	25,282	24,985	24,567	20,870
1205 - Simultaneous with Pay-As-You-Go Loan	R-5e	Owner's Policy	9	33	11	10	4
1215 - Simultaneous with Pay-As-You-Go Loan – Owner's Exceeds Loan	R-5e	Owner's Policy	10	38	7	5	6

1230 - Simultaneous with Loan with Credit for Previous Owner's Policy or Policies (Owner's Policy issued per P-8a)	R-5c, R-5d	Owner's Policy	2,345	2,144	2,141	1,793	1,491
1231 - Owner's Policy Simultaneous with Loan with Credit for Previous Owner's Policy or Policies (Owner's Policy issued without P-8a)	R-5d	Owner's Policy	-	18	-	-	-
1250 - Simultaneous with Grantor's	R-21	Owner's Policy	17	34	43	70	90
1290 - Simultaneous with Loan Following Construction in excess of $5,000,000	R-20	Owner's Policy	124	97	138	175	166
1300 - Leasehold (Single Issue)	R-1	Owner's Policy	98	207	152	660	191
1305 - Leasehold Pay As-You-Go (Single Issue)	R-2c	Owner's Policy	-	1	1	2	6
1350 - Leasehold Simultaneous with Owner's Policy	R-22	Owner's Policy	20	48	51	92	552
1400 - Leasehold (Simultaneous Issue)	R-5a	Owner's Policy	67	107	103	132	76
1405 - Leasehold Pay-As-You-Go (Simultaneous Issue)	R-5e	Owner's Policy	-	2	1	4	-
1500 - Leasehold (Simultaneous Issue) Loan Exceeds Owner's	R-5b	Owner's Policy	2	6	3	12	5
1505 - Leasehold Pay-As-You-Go (Simultaneous Issue) Loan Exceeds Owner's	R-5e	Owner's Policy	-	1	-	-	2
40 - Subsequent to Interim Construction Loan Binder	R-13B(2)	Owner's Policy	837	1,188	594	743	1,564
7000 - Single Issue U.S.A. (Forms T-6 or T-9)	R-17	Owner's Policy	4	5	7	3	7
7050 - Single Issue U.S.A. (Form T-11)	R-17	Owner's Policy	63	104	105	170	304
2000 - Personal Property Title Insurance Owner's Policy (PPT-1)	PPT R-1	Personal Property Transaction Codes	-	-	-	-	-
2005 - Datedown Endorsement (PPT-2.4)	PPT R-5	Personal Property Transaction Codes	-	-	-	1	-
10 - Charge for Additional Chains of Title	R-9	Standard Special Charges and Credits	2,823	3,863	2,543	3,414	1,529
20 - Foreclosure Credit	R-14	Standard Special Charges and Credits	(1)	3	(1)	(2)	-
50 - Credit for Commitment Premium	R-23	Standard Special Charges and Credits	-	8	24	-	3

8041 - Commitment to Texas Department of Transportation	R-23	Standard Special Charges and Credits	7	-	-	-	6
9001 - Credit for Exclusion of or General Exception for Minerals (Repealed by HB 2408 - 1/1/2012)	R-36	Standard Special Charges and Credits	69	11,002	58,412	-	-
8042 - Commitment Issued to F.D.I.C. and O.T.S.	R-25	Standard Special Charges and Credits	-	-	1	-	2

Source: Texas Department of Insurance

Table I-4: Loan policies issued 2009-2013

Policy Type and Code	Policy Rate Rule Reference	Policy Category	2013 Total Policies Issued	2012 Total Policies Issued	2011 Total Policies Issued	2010 Total Policies Issued	2009 Total Policies Issued
30 - Subsequent to Interim Construction Loan Binder	R-13B(1)	Loan Policy	23	36	36	25	56
3000 - Single issue	R-1	Loan Policy	123,434	159,973	141,315	136,839	100,303
3001 - Single Issue (Previously issued variable rate mortgagee or loan policy)	R-4	Loan Policy	0	2	0	0	0
3005 - Single Issue Pay-As-You-Go	R-2a	Loan Policy	9	15	17	18	19
3010 - Single Issue Construction Loan	R-1	Loan Policy	867	1,230	888	1,162	1,029
3011 - Single Issue Refinance of Construction Loan	R-18	Loan Policy	4,120	3,775	4,377	5,229	4636
3200 - First Lien Policy – Simultaneous with Subordinate Lien Policy(ies)	R-7	Loan Policy	628	893	1179	1167	1023
3210 - Simultaneous with Owner's Policy	R-5a	Loan Policy	239,469	225,476	212,079	272,863	253,647
3215 - Simultaneous with Owner's Policy Pay-As-You-Go	R-5e	Loan Policy	9	17	10	24	15
3220 - Simultaneous with First Lien Policy	R-7	Loan Policy	481	630	1,168	1,541	2,495
3230 - Subsequent to Owner's Policy Excepting to Lien	R-6a	Loan Policy	4	7	6	7	8
3240 - Subsequent to Loan Policy	R-6b	Loan Policy	21	304	404	480	230
3241 - Insolvent Insurer Replacement Policy	R-6c	Loan Policy	0	2	2	0	0
3250 - Simultaneous with Owner's Policy when Loan Policy Exceeds Owner's	R-5b	Loan Policy	24,231	24,329	24,990	32,128	24,571
3255 - Simultaneous with Owner's that Exceeds Loan (Pay-As-You-Go)	R-5e	Loan Policy	4	44	27	8	6
3280 - Simultaneous with Owner's with Credit for Previous Owner's Policy or Policies	R-5c, R-5d	Loan Policy	1,321	1,387	1,520	1,218	1,202
3290 - Simultaneous with Owner's Following Construction in excess of $5,000,000	R-20	Loan Policy	101	100	129	1,789	93
3295 - Limited Pre-Foreclosure Policy (T-98)	R-26	Loan Policy	0	9	9	11	32
3297 - Limited Coverage Junior Loan Policy (T-44)	R-27a	Loan Policy	0	4	2	0	3
3300 - Leasehold (Single Issue)	R-1	Loan Policy	59	119	67	98	124
3305 - Leasehold Pay-As-You-Go (Single Issue)	R-2a	Loan Policy	1	1	1	3	0
3320 - Leasehold (Simultaneous Issue)	R-5a	Loan Policy	42	191	102	166	338
3325 - Leasehold Pay-As-You-Go (Simultaneous Issue)	R-5e	Loan Policy	0	0	1	0	0
3340 - Leasehold (Simultaneous Issue) Loan Exceeds Owner's	R-5b	Loan Policy	3	9	4	5	4
3345 - Leasehold Pay-As-You-Go Simultaneous with Owner's that Exceeds Loan	R-5e	Loan Policy	4	42	0	0	1

4001 - Refinance of Loan within One Year	R-8a	Loan Policy	16,871	19,904	15,999	27,756	20,617
4002 - Refinance of Loan within Two Years	R-8a	Loan Policy	23,524	24,969	18,743	27,151	37,196
4003 - Refinance of Loan within Three Years	R-8b	Loan Policy	26,612	30,210	24,774	28,682	32,135
4004 - Refinance of Loan within Four Years	R-8c	Loan Policy	30,569	27,758	22,018	23,087	21,022
4005 - Refinance of Loan within Five Years	R-8d	Loan Policy	27,431	20,523	18,002	16,543	16,090
4006 - Refinance of Loan within Six Years	R-8e	Loan Policy	29,273	15,099	14,834	14,680	16,458
4007 - Refinance of Loan within Seven Years	R-8f	Loan Policy	18,873	12,908	12,775	15,882	15,529
6000 - Texas Limited Coverage Residential Chain of Title Policy Combined Schedule (T-53)	R-35	Loan Policy	5,117	11,657	4,624	0	0
Total Loan Policy			**573,101**	**581,623**	**520,102**	**608,562**	**548,882**

Source: Loan polices from Table I-3

Table I-5: Premiums for the regulated endorsements and unregulated title-related fees in Texas

Additional Endorsements	Premium	2013 Total Policies Issued	Total Costs
Total		**1,513,336**	**$40,891,270**
900 - Correction of Policy Amount (T-3)	$0.00	45	$0
920 - Down Date of Construction Loan Policy (T-3)	$25.00	3866	$96,650
940 - Down Date of Owner's Policy During Construction (T-3)	$25.00	447	$11,175
100 - Down Date of Interim Construction Loan Binder (T-3)	$25.00	1033	$25,825
211 - Assignment of Mortgage (T-3)	$0.00	197	$0
400 - Correction - Other than Policy Amount (T-3)	$0.00	2082	$0
500 - Amendment of Survey Exception for T-1 (T-3 or deletion)	15% of the Basic Rate in an Owner Policy, with a minimum premium of $20	6911	$138,220
501 - Amendment of Survey Exception for T-1R (T-3 or deletion)	5% of the Basic Rate in a Residential Owner Policy of Title Insurance - One-to-Four Family Residences (Form T-1R), with a minimum premium of $20.00.	32594	$651,880
550 - Completion of Improvements (T-3)	$0.00	24	$0
880 - Limited Coverage Junior Loan Additional Coverage (T-3)	$25	5	$125

820 - Leasehold Owner's Policy Endorsement (T-4)	$0.00	95	$0
822 - Leasehold Loan Policy Endorsement (T-5)	$0.00	175	$0
600 - U.S.A. Policy Acquisition of Title (T-12)	$0.00	25	$0
881 - First Loss Endorsement (T-14)	$20.00	1076	$21,520
883 - Loan Policy Aggregation Endorsement (T-16)	$100 plus $10 for each 12-month period after the first year after the issuance of the Mortgagee Policy.	846	$84,600
884 - Planned Unit Development Endorsement (T-17)	$20.00	159019	$3,180,380
887 - Planned Unit Development Endorsement (T-17) issued on two or more policies issued simultaneously on the same land	$20.00	224	$4,480
885 - Restrictions, Encroachments, Minerals Endorsement on residential real property (T-19)	$50.00	274174	$13,708,700
886 - Restrictions, Encroachments, Minerals Endorsement on land which is not residential real property (T-19)	$50.00	27242	$1,362,100
889 - Restrictions, Encroachments, Minerals Endorsement - Owner's Policy (T-19.1) on land which is not residential property and no amendment of exception to area and boundaries is made	15% of the Basic Rate for a single issue policy, the minimum premium shall be not less than $50.00	1286	$64,300
895 - Restrictions, Encroachments, Minerals Endorsement - Owner's Policy (T-19.1) on land which is not residential property and an amendment of exception to area and boundaries is made	10% of the Basic Rate for a single issue policy, the minimum premium shall be not less than $50.00	2468	$123,400

897 - Restrictions, Encroachments, Minerals Endorsement - Owner's Policy (T-19.1) on land which is residential property and no amendment of exception to area and boundaries is made	10% of the Basic Rate for a single issue policy, the minimum premium shall be not less than $50.00	1007	$50,350
898 - Restrictions, Encroachments, Minerals Endorsement - Owner's Policy (T-19.1) on land which is residential and an amendment of exception to area and boundaries is made	5% of the Basic Rate for a single issue policy, the minimum premium shall be not less than $50.00	26063	$1,303,150
801 - Minerals and Surface Damage Endorsement (T-19.2) for Owner's Policy on land which is for one-to-four family residential use of less than one acre or office, industrial, retail, mixed use retail/residential or multifamily purposes	$25.00	6698	$167,450
802 - Minerals and Surface Damage Endorsement (T-19.2) for Loan Policy on land which is for one-to-four family residential use of less than one acre or office, industrial, retail, mixed use retail/residential or multifamily purposes	$25.00	79298	$1,982,450
803 - Minerals and Surface Damage Endorsement (T-19.3) for Owner's Policy on land which is not for one-to-four family residential use of less than one acre or office, industrial, retail, mixed use retail/residential or multifamily purposes	the premium shall be $50.00 *for an endorsement to an Owner's Policy and $0.00 for an endorsement to a Loan Policy*.	769	$38,450
804 - Minerals and Surface Damage Endorsement (T-19.3) for Loan Policy on land which is not for one-to-four family residential use of less than one acre or office, industrial, retail, mixed use retail/residential or multifamily purposes	the premium shall be $50.00 *for an endorsement to an Owner's Policy and $0.00 for an endorsement to a Loan Policy*.	4148	$207,400
890 - Access Endorsement (T-23)	$25.00	6853	$171,325
891 - Non-Imputation Endorsement (T-24)	$25.00	184	$4,600

805 - Non-Imputation Endorsement (Mezzanine Financing) (T-24.1)	5% of the Basic Rate for the applicable Owner's Policy. The minimum premium for the Non-Imputation Endorsement shall be not less than $25.00.	134	$3,350
892 - Contiguity Endorsement (T-25)	$0.00	1504	$0
806 - Contiguity Endorsement (T-25.1)	$0.00	1	$0
893 - Additional Insured Endorsement (T-26)	$50.00	52	$2,600
894 - Assignment of Rents/Leases (T-27)	$100.00	1651	$165,100
888 - Condominium Endorsement (T-28)	$20.00	4714	$94,280
700 - Amendment of Tax Exception (T-30, T-3 or deletion)	$20.00	239254	$4,785,080
150 - Manufactured Housing (T-31)	$25.00	2045	$51,125
151 - Supplemental Coverage Manufactured Housing Unit Endorsement for Loan Policy (T-31.1)	$50.00	1259	$62,950
152 - Supplemental Coverage Manufactured Housing Unit Endorsement for Owner's Policy (T-31.1)	$50.00	162	$8,100
140 - Variable Rate Mortgage Endorsement (T-33)	$15.00	16296	$244,440
142 - Variable Rate Mortgage – Negative Amortization Endorsement (T-33.1)	$15.00	928	$13,920
960 - Owner Policy Increased Value Endorsement (T-34)	N/A	14	N/A
800 - Future Advance/Revolving Credit (T-35)	$25.00	1604	$40,100

810 - EPL Endorsement (T-36)	$25.00	312842	$7,821,050
311 - Partial Release, Modification, etc. (T-38)	$100.00	2543	$254,300
411 - Balloon Mortgage Endorsement, Issued at same as Policy (T-39)	$25.00	2036	$50,900
412 - Balloon Mortgage Endorsement, Issued subsequent to Policy (T-39)	$25.00	77	$1,925
875 - Equity Loan Mortgage Endorsement (T-42)	More than $50	29063	$1,453,150
876 - Supplemental Coverage Equity Loan Mortgage Endorsement (T-42.1)	$50 to an Owner's Policy	25484	$1,274,200
877 - Texas Reverse Mortgage Endorsement (T-43)	$0.00	1466	$0
879 - Limited Coverage Junior Loan Down Date (T-45)	$25.00	57	$1,425
878 - Limited Coverage Junior Loan Home Equity Line of Credit/ Variable Rate (T-46)	$25.00	81	$2,025
896 - Co-Insurance Endorsement (T-48)	$0.00	40	$0
850 - Limited Pre-Foreclosure Policy Down Date Endorsement (T-99)	$50.00	7	$350
821 - Residential Leasehold Endorsement (T-4R)	$0.00	98	$0
141 - Variable Rate Mortgage Endorsement for which there is no Charge	$20.00	442	$8,840
143 - Variable Rate Mortgage – Negative Amortization Endorsement for which there is no Charge	$20.00	26	$520
710 - Not Yet Due and Payable Tax Amendment	$5.00	230602	$1,153,010

Unregulated Fees	**Fees**
Tax certificates and escrow fees	The charge varies among title agents
Recording fees	The charge varies among title agents
Delivery expenses	The charge varies among title agents

Chapter 1

An Initial Analysis of HUD Title Insurance Data

1.1. Introduction of National HUD-1 Settlement Cost Database

The U.S. Department of House and Urban Development created the national HUD-1 settlement cost database for the Urban Institute (UI) to study national closing costs among states and within states (hereafter referred to as the HUD-1 database). The HUD-1 settlement transactions in the database were collected within the Section 203B program, and so only included single-family units and detached/row/semi detached units. Each purchase is for an existing housing unit with a thirty-year loan term, not an assumed loan, not an Adjustable Rate Mortgage (ARM), not a refinanced loan, nor a home equity conversion mortgage (HECM). The closing date on each HUD-1 form occurred between May 21, 2001 and June 30, 2001. The number of transactions in the HUD-1 database in each state were not the same among all states reflecting the fact that the number of Federal Housing Administration (FHA) transactions were low in some states and requested FHA files were not available for some states. The maximum sample size for a state is two hundred. The HUD-1 database contains 9,314 observations from 50 states and the District of Columbia. HUD designed the sampling process to select among eligible FHA transactions randomly with equal probability within each state. The weight is the inverse probability of being included in the final sample, which is also provided by the HUD-1 database. Table 1.1.1 lists the population and sample sizes by state.

The HUD-1 national database contains 496 variables, including standard HUD-1 data

items and new variables for reclassifying common extra items, such as paid outside of closing (POC) items and variables for capturing “write-in” extra items and POC items. The so-called 1100 Series data includes title charges with 78 variables, including 10 variables related to title insurance costs. The key ten variables include the settlement agent's fee, the fees for the abstract or title search, the fees for title examination, the cost for the title insurance binder, charges for document preparation, any fee charged by a notary, the attorney's fees for the transaction, endorsement costs, and individual charges for the so-called Lender's and Owner's title policies. Based on these observations, it is possible to compute seven title-related charges. Table 1.1.2 defines these seven title-related charges. These seven variables are used to analyze variations of title costs across and within states in the report.

Table 1.1.1 Population and Sample Sizes by State of the National HUD-1 Database

State	Population	Sample	State	Population	Sample
AL	1,486	190	MT	358	178
AK	205	168	NE	867	197
AZ	2,876	189	NV	1,227	204
AR	1,061	180	NH	292	193
CA	8,663	187	NJ	2,345	190
CO	3,143	153	NM	616	189
CT	1,043	184	NY	2,829	177
DE	378	184	NC	1,907	186
DC	112	97	ND	281	259
FL	6,602	202	OH	4,204	198
GA	3,861	200	OK	1,685	219
HI	47	22	OR	1,203	162
ID	686	193	PA	3,934	191
IL	4,097	188	RI	286	196
IN	2,723	207	SC	686	179
IA	748	191	SD	260	196
KS	1,065	204	TN	2,352	205
KY	1,162	211	TX	8,597	188
LA	1,472	215	UT	1,272	202
ME	267	180	VT	53	41
MD	3,700	183	VA	3,929	189
MA	843	151	WA	2,047	144
MI	3,598	193	WV	251	196
MN	2,043	188	WI	897	195
MS	778	197	WY	230	210
MO	2,342	173	Total	97,609	9,314

Data source: the national HUD-1 settlement cost database created by the U.S. Department of House and Urban Development.

Table 1.1.2 Definition of Seven Title-Related Variables

Variable	Definition
Total Title Charges	Total title charges include all charges paid by consumers to the settlement agent or to attorneys for title services
Owner's policy coverage premium	Owner's premium are shown in line 1109 on HUD-1 form
Lender's policy coverage premium	Lender's premium are shown in line 1110 on HUD-1 form
Premium Plus Endorsement Costs	Premiums shown on line 1108 plus endorsements that are shown in the extra lines on the HUD-1 form
Endorsements	Endorsements are shown in extra lines on the HUD-1 form
Attorney fees	Attorney fees are fees paid to attorneys representing clients at a closing
Net service fees	Total title charges minus attorney fees

Source: Feinburg, Robert, et al. "What Explains Variation in Title Charges? A Study of Five Large Markets." A Study of Five Large Markets (June 20, 2012). Prepared for US Department of Housing and Urban Development Office of Policy Development and Research (2012).

1.2 Introduction of Metropolitan HUD-1 Settlement Cost Database

The Urban Institute (UI) collected the Metropolitan HUD-1 Settlement Cost Database to supplement the national HUD-1 settlement cost database. The Metropolitan HUD-1 database includes nearly 3,000 observations from five metropolitan locations: Philadelphia, Pennsylvania; Phoenix, Arizona; Broward County, Florida; Sacramento County, California; and Cook County, Illinois. These five metropolitan areas correspond to three counties and two cities as defined by the U.S. Census Bureau. Table 1.2.1 summarizes the sample for each metropolitan area.

The selection criterion for the Metropolitan sample were identical to the criteria for the national HUD-1 database. In each metropolitan area, eligible transactions have an equal probability to be selected into the final sample. Transactions already selected into the national database were excluded from the population prior to sampling. Neither the HUD nor the UI provided weights for the metropolitan database. The variable definitions in this database are identical to the definitions in the national database.

Table 1.2.1 Population and Sample Sizes of HUD-1 Metropolitan Database

Metropolitan Area/City	**Largest Place**	**% of Population in largest Place**	**Loan Population**	**Metropolitan Sample**
Cook County, IL	Chicago	54	1295	729
Philadelphia, PA	Philadelphia	100	827	492
Phoenix, AZ	Phoenix	100	779	504
Sacramento County, CA	Sacramento	33	719	572
Broward County, FL	Fort Lauderdale	9	670	542

Data source: Metropolitan HUD-1 Settlement Cost Database created by the U.S. Department of House and Urban Development.

1.3 Total Title Charges

Total title charges include all charges paid by consumers to the settlement agent or to attorneys for title services (Feinburg, Robert, et al, 2012). The "total title charges" include the sum of all the items of 1100 series in HUD-1 form with no double-counting charges or fees. Figure 1.3.1 to Figure 1.3.50 are scatter figures that compare Texas' total title charges to the 50 states and District of Columbia.

The total title charges in 50 states and D.C. vary by coverage amount or loan amount. The fitted lines in each of the 50 scatter figures indicates a positive slope, which means total title charges increase when coverage amounts increase. The value of each slope differ among the states. Texas has a high slope compared to other states, which means that title prices increase at a higher rate as the mortgage value increases. The graph alone provides limited information about significant differences of charges between Texas and each other state. One next step would be to regress total title charges on coverage amount, to assess whether the costs of title insurance as well as the rates of change of title charges in Texas are significantly higher than the slopes in other states.

Total title charges vary substantively across states. The highest total title charges in the national database is $6,783 dollars in New York and the lowest total title charge is $45 dollars in Arizona. For each amount of title coverage, total title charges in Texas was significantly higher than 43 states in the U.S. For other seven states, (including Arizona, California, Connecticut, Florida, New Jersey, New York and Oklahoma), total title

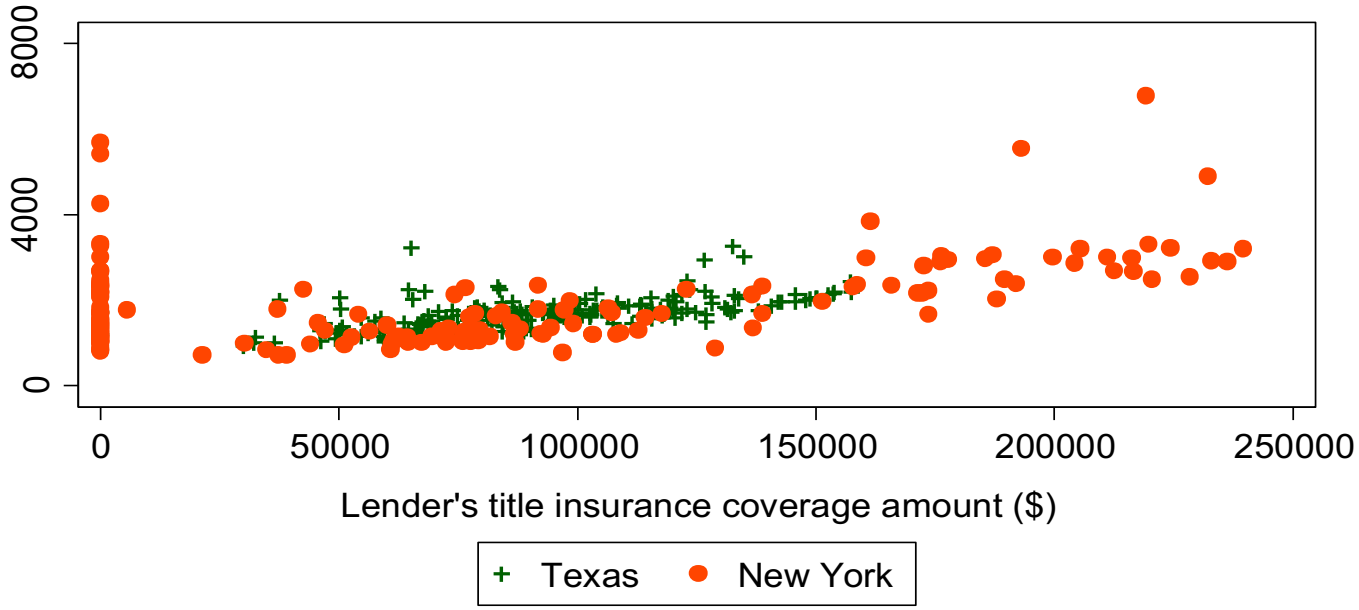
charges are comparable to the total title charges in Texas. One next step would be to use a so-called "t-test" to examine whether a statistically significant difference exists between title charges in Texas and other states. Further study could analyze characteristics of these seven states, such as regulation types. Regression can help identify which characteristics contribute to the variability of total title charges across states.

Fifty scatter figures illustrate how total title charges vary between Texas and each state in the U.S. (see Figures 1.3.1 to 1.3.50). In each figure, the X axis is lender's title insurance coverage amount ($), indicating the loan amount. The Y axis is total title charges ($). The range of the X axis differs for each figure, but the range in most figures is from $0 to $250,000. The range of Y axis depends on total title charges in each states. Each point in the figures represents a transaction in the HUD database. Each cross point indicates a HUD transaction in Texas. Each round point indicates a transaction in another state.

Consider the comparison of Texas versus New York as an example. Figure 1.3.33 shows the comparison of total title charges between Texas and New York. The total title charges increase when loan amount increase in each of the two states. The variations in two states are similar, so it would be necessary to use a t-test to check whether the growth rate of total title charges are statistically different in the two states. For each loan amount, there appears to be some variance of total title charges, which means for

the same loan amount, the total title charges may vary among different transactions. The different services covered by the title insurance premium and whether a transaction includes an attorney are possible reasons for such variance. Regression analysis would be an appropriate tool to use to try to explain the variance. Several transactions in New York are interesting. The loan amount is zero, but the total title charges still exist for these transactions. One possible explanation for these observations could be that people may purchase title insurance policy without financing the purchase with a mortgage.

Figure 1.3.33 Comparison of Total Title Charges Between Texas and New York



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

1.4 Owner's Policy Coverage Premium

The owner's policy coverage premiums are paid directly to the settlement agent (Feinburg Robert et al. 2012). A certain proportion of the premiums are passed on to the underwriter; the actual amounts may depend a state law allocating premiums or negotiations between settlement agent and underwriter.

Owner policy coverage premiums vary across 50 states and District of Columbia. One possible reason is that the services covered by a title insurance premium vary across the states. Table 1.4.1 lists the services covered by each state. For each loan amount, owner's policy coverage premiums in Texas are higher than other states. One explanation could be that owner's policy coverage premiums in Texas covers all the title services, including title examination, title search, risk premium, and a settlement conference. Table 1.4.1 shows seven states which title premium covers comprehensive title services, including Alaska, California, Nevada, Pennsylvania, South Dakota, Texas, and Wisconsin. Among these seven states, the owner's policy coverage premiums in Texas are still the highest for each level of loan amount. Further study can apply regression to analyze (a) whether different service coverage across states contribute to the differences in owner's policy coverage premiums across states, and (b) how other factors contribute to the differences in owner's policy coverage premiums within seven states providing comprehensive title service.

In Texas, the owner's policy coverage premiums seem to vary by the coverage amount

or the value of the property. Because of the fixed premium rate, there is no variance of owner's policy coverage premiums for the same coverage amount within Texas. In some other states, for each coverage amount, there can be limited variability in the owner's policy coverage premiums. In 2001, three states in the U.S., Texas, Florida and New Mexico, operated with the strictest regulation type, promulgated premium rate. According to the slope in figures for these three states, Texas has the highest promulgated premium rate; further study could seek to explain these three cases.

Figure 1.4.1 to 1.4.50 illustrate the comparisons of owner's premium between Texas and each state in the U.S. The X axis is owner's title insurance coverage amount ($), indicating the loan amount. The Y axis is owner's title insurance premiums ($). The range on the X axis differs for each figure, but in most figures X varies $0 to $300,000. The range on the Y axis depends on the variance of owner's title insurance premiums in each states. Each scatter point in the figures is a transaction in HUD database. A cross point indicates a transaction in Texas. A round point indicates a transaction in another state.

Consider the comparison of Texas and New York as an example. Figure 1.4.33 illustrates the comparison of owner's title insurance premiums between Texas and New York. The owner's title insurance premiums increase when owner's title insurance coverage increase in both two states. The rate of growth of owner's title insurance premiums in Texas is significantly higher than that of New York. The different services

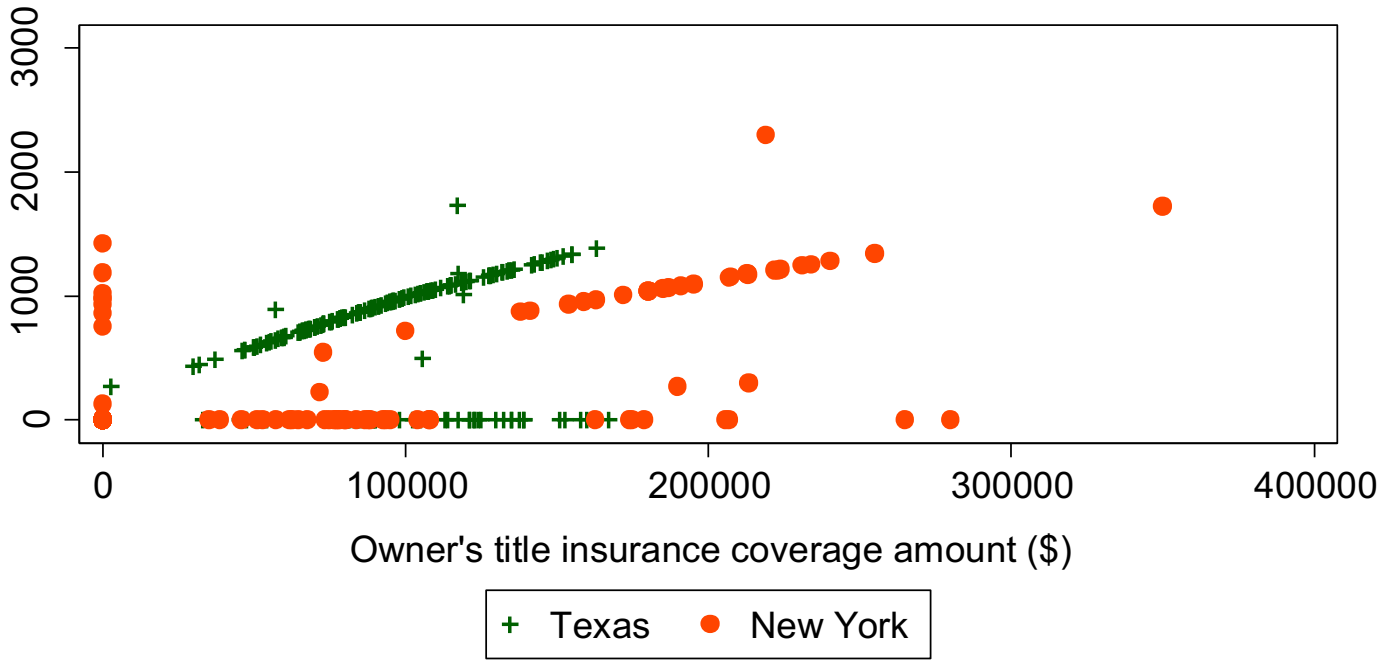
covered by the title insurance premium could be a possible reason for such different slopes. For each owner's title insurance coverage, there is almost no variability of owner's title insurance premiums in both states, which means these two states have a fixed premium rate for each coverage amount. Some transactions in each state have zero premium for owner's title insurance coverage. One possible explanation is when a consumer purchased a lender's premium, she/he may get a free owner's title insurance. Several transactions in New York are interesting. The loan amount is zero, but the owner's premiums still exist for these transactions. One possible explanation for these observations is that customers may purchase a title insurance policy without requiring a mortgage to finance the purchase.

Table 1.4.1 The title services covered by premium

Risk Premium Only	**Title Examination and Risk Premium Only**	**Title Examination, Search, and Risk Premium**	**Comprehensive**
Alabama	Illinois	Idaho	Alaska
Arkansas	Oklahoma	Michigan	California
Connecticut	Wyoming	Montana	Nevada
Delaware		Nebraska	Pennsylvania
Florida		Oregon	South Dakota
Georgia		Utah	Texas
Hawaii			Wisconsin
Indiana			
Kansas			
Kentucky			
Louisiana			
Maine			
Maryland			
Massachusetts			
Minnesota			
Mississippi			
Missouri			
New Hampshire			
New Jersey			
New Mexico			
New York			
North Carolina			
North Dakota			
Ohio			
Rhode Island			
South Carolina			
Tennessee			
Vermont			
Virginia			
West Virginia			

Note: Data were not available for the states of Arizona, Colorado, Iowa, and Washington from the source. Data Sources: Clifton, Robert. (2000). *Taxonomy and Anatomy of Title Insurance Rate Regulation*. Austin: The University of Texas at Austin; and websites of state insurance agencies.

Figure 1.4.33 Comparison of Owner's Premium Between Texas and New York



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

1.5 Lender's policy coverage premium

A property buyer may pay for a lender's policy coverage premium directly to the settlement agent (Feinburg Robert, et al. 2012). Discounts may apply to a lender's policy coverage if a lender's policy is purchased with an owner's policy. Discounts can vary across states.

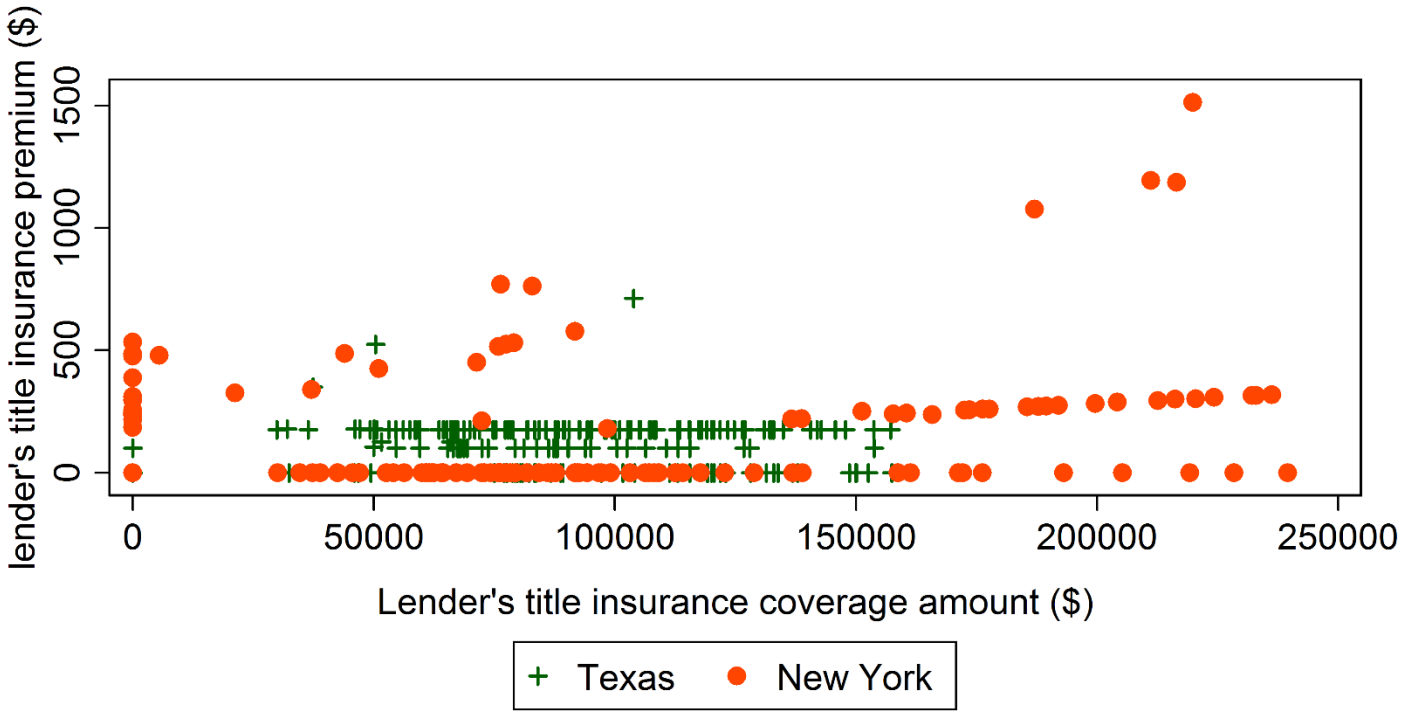
In Texas, the lender's policy coverage premiums seem to have two fixed prices which do not depend on coverage amount. One fixed price for the lender's title insurance policy is $100, which is the promulgated incremental cost for a simultaneous lender's title insurance price after a consumer purchases an owner's title insurance. The other fixed price of lender's title insurance policy ($175) may include additional endorsements (information is provided by Arturo Bustamante from Texas Department of Insurance in May 2, 2016). The pattern of lender's policy coverage premiums in Texas are similar as that of seven states including Colorado, Kansas, Missouri, New Jersey, New Mexico, Pennsylvanian and Wisconsin. The lender's policy coverage premiums in these seven states are almost the same for each level of loan amount. Lender's policy coverage premiums in Texas are higher than the three of these seven states, Colorado, New Jersey and New Mexico. In the other 43 states, lender's policy coverage premiums increase when loan amounts increase. For each level of coverage amounts, there exists a substantial variance of lender's policy coverage premiums within each state.

Fifty scatter figures illustrate the comparisons of lender's premium between Texas and

each state in the U.S. (see Figures 1.5.1 to 1.5.50). The X axis is lender's title insurance coverage amount ($), indicating the loan amount. The Y axis is lender's title insurance premiums ($). The range of X axis differs for each figure, but in most figures range from $0 to $250,000. The range of the Y axis depends on the cost of lender's title insurance premiums in each state. Each scatter point in the figures is a transaction in HUD database. A cross point indicates a transaction in Texas. A round point indicates a transaction in another state.

Figure 1.5.33 compares lender's premiums between Texas and New York. The lender's title insurance premiums in Texas are at two fixed prices. One fixed price ($100) is the promulgated discounted price for purchasing a lender's title insurance after an owner's title insurance policy is purchased. The other fixed price ($175) may include additional endorsements. The lender's title insurance premiums in New York increase slightly when loan amounts increase, when a loan amount is higher than $130,000. For a coverage amounts that is lower than $100,000, the variance of lender's policy coverage premiums within New York exists. Some transactions in New York have lender's premiums that increase with a higher loan amount. Many transactions in both states have a zero premium for a lender's title insurance coverage. Several transactions in New York are interesting, as the loan amount is zero, but the lender's premiums still exist for these transactions. One possible explanation for these observations is that customers may purchase a title insurance policy without requiring a mortgage to finance the purchase.

Figure 1.5.33 Comparison of Lender's Premium Between Texas and New York



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

1.6 Premium Plus Endorsement Costs

Although some standard title endorsements may be covered by the title premium, some endorsements also appear in the extra lines provided on the HUD-1 form (Feinburg Robert, et al. 2012). The variable "premium plus endorsement costs" allows an analyst to compare the sum of the title insurance coverage premium and endorsement costs across all the states.

For most of the states, the pattern of premium plus endorsement are almost the same as the graphs for the owner's policy coverage premium. Texas's variation of premium plus endorsement costs is smaller compared to that of all other states. Premiums plus endorsement costs differ across 50 states and D.C. One possible reason is that the services covered by a title insurance premium vary across the states. For each loan amount, premiums plus endorsement in Texas are significantly higher than all other states, perhaps because an owner's policy coverage premium in Texas covers all the title services, including title examination, title search, risk premium and the closing conference. As premium plus endorsement is more comparable across the states than only premium, this variable could be used as the dependent variable to study whether different services coverage across 50 states contribute to variance of premium plus endorsement, or how other factors contribute to variance of premium plus endorsement within the seven states with comprehensive title service.

In Texas, the owner's policy coverage premiums seem mainly depend on coverage size

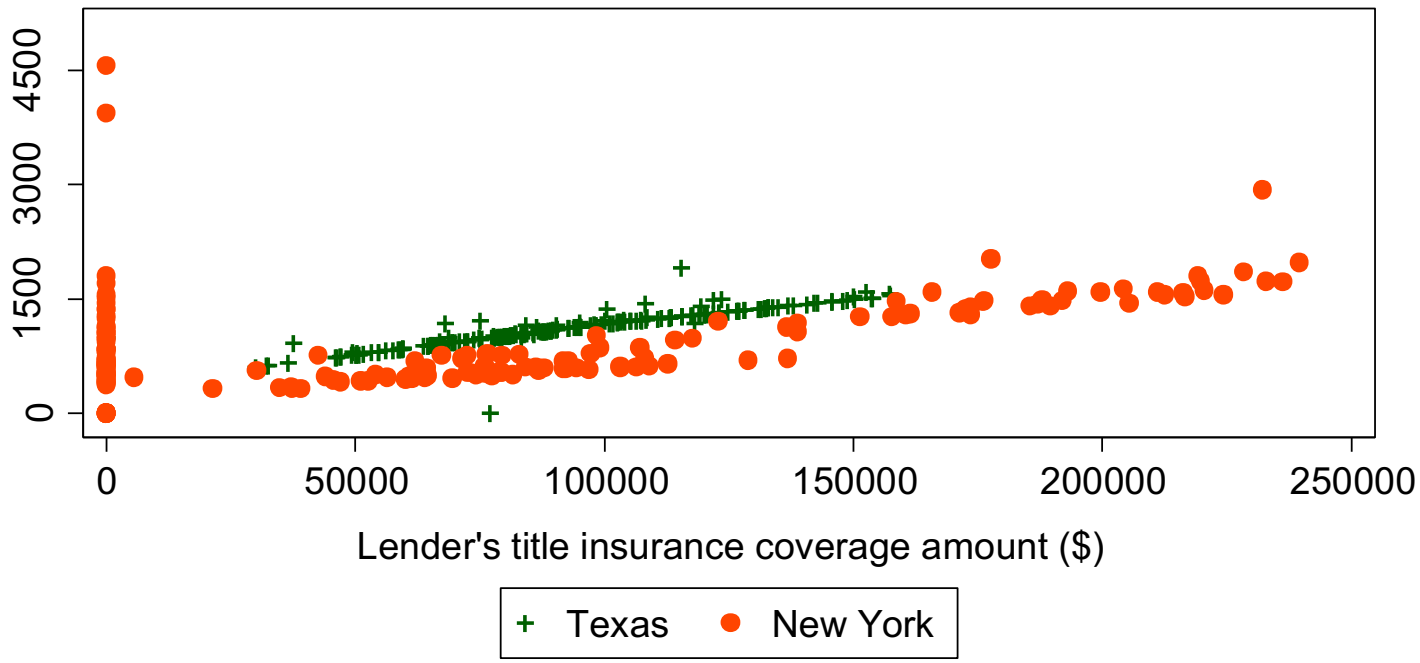
of the mortgage, or the value of the house. Because of the fixed premium rate, there is no variability in the owner's policy coverage premiums for the same level of mortgage coverage in Texas. In many other states, for each level of coverage, there is variability in the owner's policy coverage premiums exists. Three states in the U.S., Texas, Florida and New Mexico, adopted promulgated premium rate in 2001. According to the slope in figures for these three states, Texas has the highest promulgated premium rate.

Fifty scatter figures illustrate the comparisons of premium plus endorsement costs between Texas and each state in the U.S. (see Figures 1.6.1 to Figure 1.6.50). The X axis is for lender's title insurance coverage amount ($), indicating the loan amount. The Y axis is for premium plus endorsement costs ($). The range on the X axis differs for each figure, but the most figures range from $0 to $300,000. The range on the Y axis depends on the premium plus endorsement costs in each state. Each scatter point in the figures is a transaction in HUD database. A cross point indicates a transaction in Texas. A round point indicates a transaction in another state.

Figure 1.6.33 compares premium plus endorsement costs between Texas and New York, for example. The premium plus endorsement costs increase when lender's title insurance coverage increase. The rate of growth of premium plus endorsement costs in Texas is significantly higher than that of New York. The different services covered by the title insurance premium may be a possible reason for such differences. For each level of title insurance coverage, the premium plus endorsement costs do not vary in

Texas, but there is substantial variability in premium plus endorsement costs in New York. These difference may be due to the diversity of endorsements in New York or other factors. Several interesting transactions in New York exist with a zero loan amount but with title premiums plus endorsements. One possible explanation for these observations is that a customer may purchase title insurance policy without requiring a mortgage to finance the purchase.

Figure 1.6.33 Comparison of Premium Plus Endorsement Between TX and NY



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

1.7 Endorsements

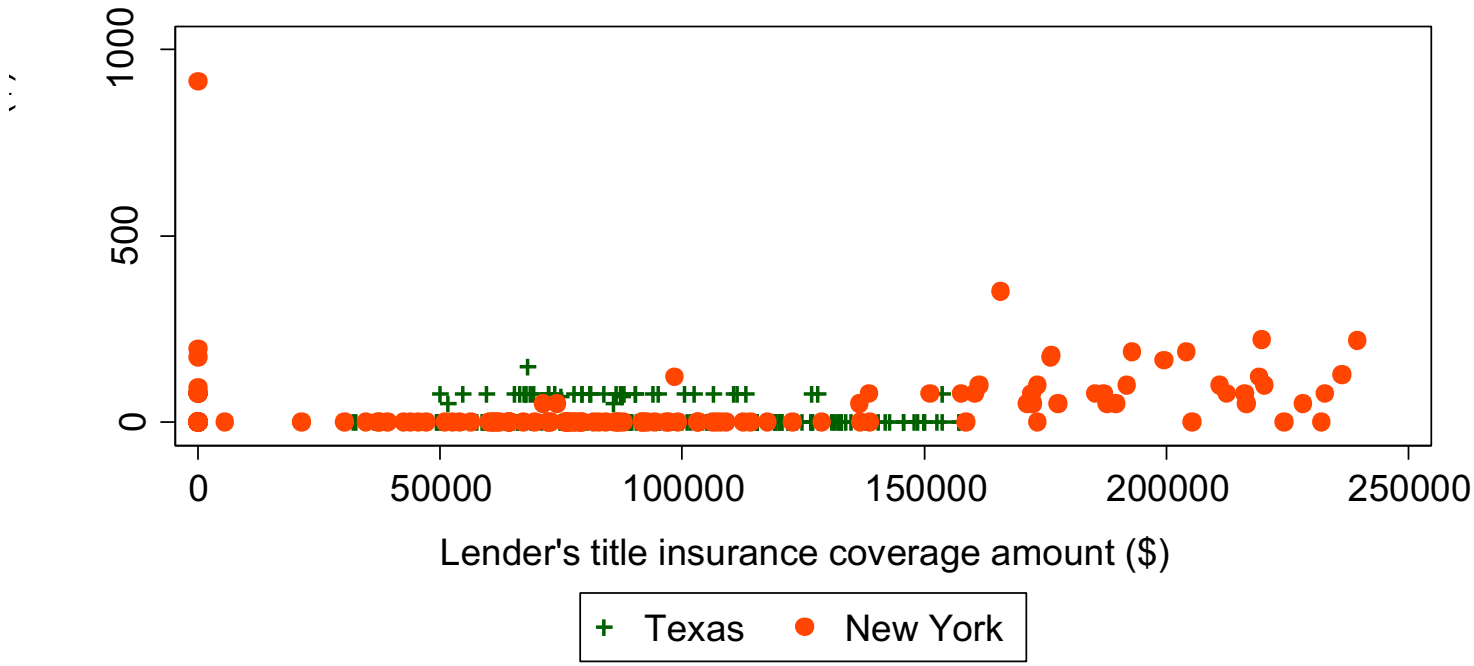
Some standard endorsements may be covered by the premium, but endorsements also appear in extra lines provided on the HUD-1 form (Feinburg Robert, et al. 2012). When endorsements are included in premiums, endorsements are not separated from premiums. “Endorsements” per se used in this data set include only items that appear in the extra lines.

In Texas, supplement endorsements are not included in the premium. Endorsements in 2001 seem to have a fixed price at about $75, which doesn’t depend on coverage amounts. Endorsements vary substantively across 50 states and District of Columbia. Endorsements in Texas are higher than 31 states in the U.S. As the endorsements appear to follow a fixed price in Texas, the variance of endorsements in other states are larger than that of Texas.

Fifty scatter figures illustrate the comparisons of supplement endorsements between Texas and each state in the U.S. (see Figures 1.7.1 to Figure 1.7.50). The X axis is lender’s title insurance coverage amount ($), indicating the loan amount. The Y axis is endorsements ($). The range of the X axis differs for each figure, but the range in most figures is from $0 to $250,000. The range of the Y axis depends on the value of endorsements in each states. The scatter point in the figures represents a transaction in HUD database. Each cross point indicates a transaction in Texas. Each round point indicates a transaction in another state.

For example, Figure 1.7.33 compares endorsements costs between Texas and New York. The endorsements in Texas are at two fixed prices. Most of the transactions in New York are at a fixed price. The fixed price is mainly for loan amounts lower than $140,000. Many transactions with a loan amount higher than $170,000 in New York have various other endorsements. When a loan amount is lower than $170,000, endorsements in Texas are higher than endorsements in New York. As there are no Texas data points for loan amounts higher than $170,000, it is not possible to compare endorsements between Texas and New York for higher loan amount transactions.

Figure 1.7.33 Comparison of Endorsements Between Texas and New York



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

1.8 Attorney Fees

Attorney fees represents a payment to an attorney representing a client at a closing (Feinburg Robert, et al. 2012). In some states, an attorney may serve as a settlement agent or in other roles, but they are not likely to do so in other states.

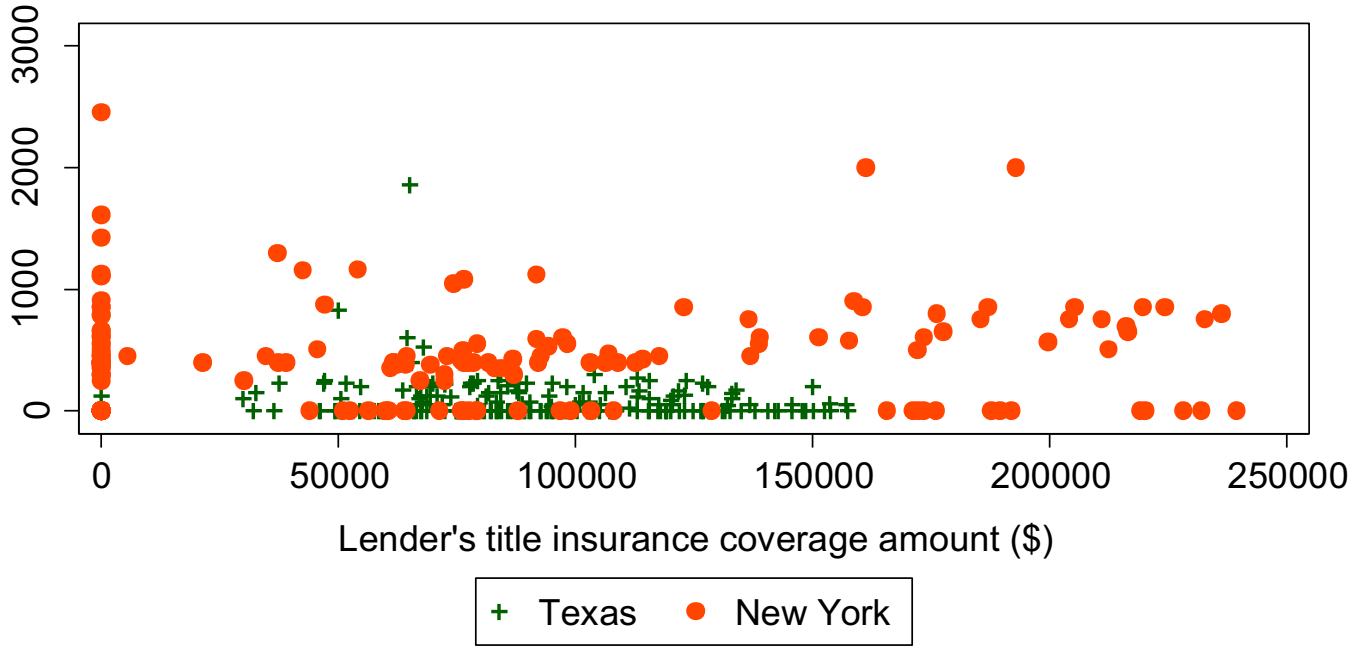
Attorney fees vary among the 50 states and District of Columbia. Attorney fees do not appear to depend on loan amount, which could be an indicator that the market of attorney service is more competitive. Although attorney fees vary within Texas, almost all the attorney fees are lower than $500. For each level of coverage, attorney fees in Texas are higher than attorney fees in 27 states, including Alaska, Arizona, Arkansas, California, Colorado, D.C., Florida, Hawaii, Idaho, Indiana, Iowa, Kansas, Maryland, Michigan, Minnesota, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming. Further study could identify through t-tests whether attorney fees in Texas are statistically different from attorney fees in other states.

Fifty scatter figures illustrate comparisons of attorney fees between Texas and each state in the U.S. (see Figures 1.8.1 to 1.8.50). The X axis is lender's title insurance coverage amount ($), indicating the loan amount. The Y axis is attorney fee ($). The range of X axis are different for each figure, but the range in most figures are from $0 to $250,000. The range of Y axis depends on the attorney fees in each states. Each scatter point in the figures is a transaction in HUD database. A cross point indicates a transaction in

Texas. A round point indicates a transaction in another state.

Figure 1.8.33 compares the attorney fees between Texas and New York. The attorney fees in Texas are significantly lower than attorney fees in New York. Most attorney fees in Texas are lower than $500. Most attorney fees in New York per property transaction are higher than $500 and lower than $1500. For each loan amount, attorney fees vary in the two states, which could indicate the attorney market is more competitive. Several transactions in New York are interesting. The loan amount is zero, but attorney fees still exist for these transactions. One possible explanation for these observations is that customers may purchase a title insurance policy without requiring a mortgage to finance the purchase.

Figure 1.8.33 Comparison of Attorney Fees Between Texas and New York



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

1.9 Net Service Fees

Net service fees are the total title charges minus both attorney fees and the portion of the premium and endorsements that pass to the insurance underwriter. As the amount paid to the underwriter may be fixed in some states and negotiated in other states, it is hard to know what fraction of fees are passed to the insurance underwriter in each state (Feinburg, Robert, et al, 2012).

In this study, net service fees are defined as total charges minus the attorney fee. As attorney fees are only a small portion of total title charges, the pattern of net service fees in each state are almost the same as the total title charges in each state, except for Illinois, New Jersey, New York, North Carolina, and Rhode Island. The difference of net service fees between Texas and these five states are higher than the difference of total title charges between Texas and these five states.

The net service fees in 50 states and Washington D.C. all depend on coverage amount, which reflects loan amount. The fitted lines in all 50 scatter figures have positive slopes, which means the total title charges increase when coverage amounts increase. The levels of slope differ across states. Texas has a high slope compared to other states. Further study could regress net service fees on coverage amount to evaluate whether Texas' net service fees are significantly higher than the slopes in other states.

Net service fees vary substantively across states. The highest net service fees in the

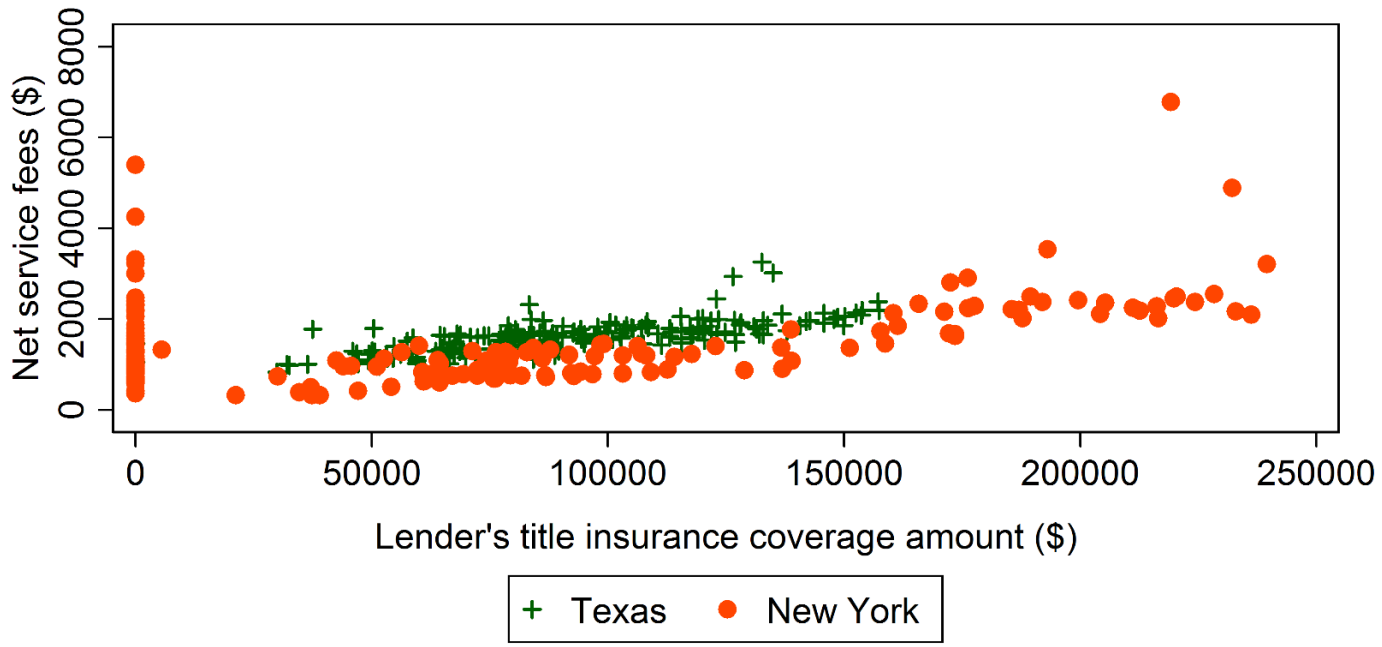
database is $6,783 in New York and the lowest net service fees is $0 in Iowa. For each amount of coverage, net service fees also vary within and across states. One possible explanation could be the different services covered by the title services in different states.

Fifty scatter diagrams illustrate comparisons of net service fees between Texas and each state in the U.S. (see Figures 1.9.1 to 1.9.50). The X axis is lender's title insurance coverage amount ($), indicating the loan amount. The Y axis is net service fees ($). The range of the X axis differs for each figure, but most figures range from $0 to $250,000. The range of Y axis depends on the variance of net service fees in each states. Each scatter point in the figures is a transaction in HUD database. A cross point indicates a transaction in Texas. A round point indicates a transaction in another state.

Figure 1.9.33 illustrates the net service fees comparison of Texas and New York, for example. The net service fees increase when a loan amount increases in each state. The variations in two states are similar, so a t-test could be used to check whether the growth rate of total title charges are statistically different in two states. Total title charges vary in both states for each loan amount. The different services covered by the title insurance premiums is a possible reason for such variation. Regression analysis could help to explain the differences. Several interesting transactions in New York exist, some as a zero loan amount with positive net service fees. One possible explanation for these observations is that customers may purchase a title insurance policy without requiring

a mortgage to finance the purchase.

Figure 1.9.33 Comparison of Net Service Fees Between Texas and New York



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

1.10 Further study

In further study it could be useful to test whether significant differences exist among each of these seven variables between Texas and other states and to explain why these seven variables vary within Texas and across the states.

Table 1.10.1 shows the regulation type of title insurance for each state in 2001. There were five types of regulation. There were 36 “file and use” states, four “use and file” states (Utah, Kansas, Vermont, and Wisconsin), and six “prior approval” states (Idaho, Arizona, New Hampshire, South Carolina, Connecticut and New Jersey). Three states (Florida, New Mexico, and Texas) directly promulgated rates for insurers. The remaining states had no rate filing requirements for title insurers. One interesting test would be whether different types of regulation affect title charges across the states.

As for total title charges, even the scatter groups indicate that Texas’s total title charges are significantly higher than 43 states in the U.S. For other seven states, (including Arizona, California, Connecticut, Florida, New Jersey, New York and Oklahoma), the total title charges are comparable to the total title charges in Texas. In further study, it would be possible to use t-tests to check whether statistically significant differences exist. It would be useful to analyze whether characteristics of these seven states, such as regulation types, affect title charges. Regression can help identify whether the difference of characteristics contribute total title charges across states.

Regression analysis of premiums and premiums plus endorsement can examine whether different service coverage affects premiums across states. It can also assess whether other factors affect premiums within seven states with comprehensive title service. Table 1.4.1 lists the title services covered by premium. T-tests of attorney fees can evaluate whether attorney fees in Texas differ from attorney fees in other states. Regression analysis of net service fees can study whether the changes of net service fees in Texas are higher than the changes of net service fees in other states.

Table 1.10.1 The Title Insurance Regulation Types (in 2001)

State	Policy Type	State	Policy Type
Alaska	File and Use	Montana	File and Use
Alabama	No Active Regulation	North Carolina	File and Use
Arkansas	No Active Regulation	North Dakota	File and Use
Arizona	Prior Approval	Nebraska	File and Use
California	File and Use	New Hampshire	Prior Approval
Colorado	File and Use	New Jersey	Prior Approval
Connecticut	Prior Approval	New Mexico	Promulgated
D.C.	No Active Regulation	Nevada	File and Use
Delaware	File and Use	New York	File and Use
Florida	Promulgated	Ohio	File and Use
Georgia	No Active Regulation	Oklahoma	No Active Regulation
Hawaii	No Active Regulation	Oregon	File and Use
Iowa	No Active Regulation	Pennsylvania	File and Use
Idaho	Prior Approval	Rhode Island	File and Use
Illinois	No Active Regulation	South Carolina	Prior Approval
Indiana	No Active Regulation	South Dakota	File and Use
Kansas	Use and File	Tennessee	File and Use
Kentucky	File and Use	Texas	Promulgated
Louisiana	File and Use	Utah	Use and File
Massachusetts	No Active Regulation	Virginia	No Active Regulation
Maryland	File and Use	Vermont	Use and File
Maine	File and Use	Washington	File and Use
Michigan	File and Use	Wisconsin	Use and File
Minnesota	File and Use	West Virginia	No Active Regulation
Missouri	File and Use	Wyoming	File and Use
Mississippi	No Active Regulation		

Sources: Clifton, R. (2000). Taxonomy and Anatomy of Title Insurance Rate Regulation. TX: The University of Texas at Austin; and websites of state insurance agencies.

Chapter 2

An Analysis of HUD Title Insurance Data, Bank of America Title Insurance Data and Stewart Title Insurance Data

Summary of Title Insurance Analysis Based on HUD-1 Database

The national HUD-1 settlement cost database created by the U.S. Department of House and Urban Development in 2001. The HUD-1 database contains 9,314 observations from 50 states and the District of Columbia. HUD designed the sampling process to select among eligible FHA transactions randomly with equal probability within each state. The weight is the inverse probability of being included in the final sample, which is also provided by the HUD-1 database. Based on the HUD-1 database, this report identifies two comparable title related charges among all states to conduct regression analysis, including "total title charges" and "premiums plus endorsements costs." The total title charge includes all the charges relevant to title insurance, including premiums, title search, title examination, endorsement, and closing fee. Premiums plus endorsements costs represents the sum of owner's title insurance premiums, lender's title insurance premiums and endorsement costs. The premiums plus endorsements in Texas are on average significantly higher than the premiums plus endorsement in all other states and the District of Columbia. The total title charge in Texas is on average significantly higher than total title charges in 44 states and the District of Columbia. Only the total title charges in California, Connecticut, New Jersey and New York are higher than the total title charge in Texas.

This study evaluates a series of hypotheses to assess why total title charges and premiums plus endorsements costs vary among states; it seeks to explain the different

prices of total title charges and premiums plus endorsements costs among all states. Four sets of potential independent variables are tested in the report: loan amount; premium regulation types; title premium service coverage; and state characteristics. The regression results show that regulation type is the independent variable that best explains the different title related charges across the states. The states with promulgated rate, such as Texas, have significantly higher costs of total title charges and premiums plus endorsements costs. The total title charges in a state with promulgated rates is on average $316 higher than the total title charges in a state with no active regulation. The average premiums plus endorsements cost in a state with the regulation type of "promulgated rates" is $427.10 higher than the average premiums plus endorsement in a state without any active regulation. An explanation is that state promulgation of minimum title rates set a floor in title insurance; regulation decreases the level of competition and leads to high costs. Therefore, Texas's regulation policy explains the higher total title charge and premiums plus endorsements in Texas versus other states. The comprehensive service coverage does not help explain the different prices of total title charges and premiums plus endorsements costs among all states. It means that the average prices of total title charges and premiums plus endorsements in a state that offers comprehensive service do not on average differ from states where the total title charges and premiums plus endorsement includes risk premiums. Total title charges and premiums plus endorsements are positively associated with loan amount or property value; the higher the loan amount or property value, the higher the expected value of title insurance. Total title related charges are also positively associated with

median house price in each state. The regulation types, service coverage, loan amount and states' characteristics can explain 35 percent and 39 percent of the variance in total title charges and premiums plus endorsements separately.

2.1 Regression Analysis of HUD-1 Data

The U.S. Department of House and Urban Development created the national HUD-1 settlement cost database for the Urban Institute (UI) to study national closing costs among states and within states (hereafter referred to as the HUD-1 database). The closing date on each HUD-1 form occurred between May 21, 2001 and June 30, 2001. The HUD-1 database contains 9,314 observations from 50 states and the District of Columbia. Using this database, this study seeks to explain the variation of total title charges and premiums plus endorsement across 50 states and the District of Columbia. There are several alternative hypotheses to explain the variation in total title charges and premiums plus endorsement.

One hypothesis is that regulation style affects title insurance rate. There are five different regulation types, including (1) no active regulation, (2) file and use, (3) use and file, (4) prior approval, and (5) promulgated rates. Regulation styles may affect both the total title charges and premiums plus endorsement and explain a portion of the variation of both total title charges and premiums plus endorsement across states. For example, promulgated minimum required title charges could be associated with lower level of competition, which might result in higher title insurance charges. If so, regression ought to find that stricter regulation of title insurance market could be associated with higher title insurance charges.

For example, hypothesis 1a would be that different regulation styles affect state total title charges. For example, total title charges under the regulation of file and use, use and file, prior approval, and promulgate rates may be higher than the total title charges in the states without regulation. Hypothesis 1b would be that different regulation styles affect the variation of premiums plus endorsement. For example, premiums plus endorsement under the regulation of file and use, use and file, prior approval, and promulgate rates might be higher than the premiums plus endorsement in the states without regulation.

The cost of title insurance services may be affected by type of services included within the premiums, such as risk, title search, title examination, and closing services. It is possible that the more diverse the services covered, the higher the cost of title insurance services. As a result, if more diverse services are covered in the premium, then the premiums plus endorsement ought to be higher. For example, comprehensive title service in Texas includes within the title charge the premium risk, title search, title examination, and closing services. Hypothesis 2a is that the total title charges are not influenced by service coverage. Hypothesis 2b is that the premiums plus endorsement are positively related to the degree of comprehensiveness of service coverage.

The descriptive analysis in the first chapter shows that the loan amount or property value affects premium plus endorsements and total title charges. The characteristics of each state, such as income per capita and house price, could affect the total title charges

and premiums plus endorsement. Hypothesis 3a is the total title charges would be positively related with loan amount or property value. Hypothesis 3b is premiums plus endorsement are positively related with loan amount or property value. Hypothesis 4a is that total title charges are influenced by a state's house price and income per capita. Hypothesis 4b is that premiums plus endorsement would be influenced by a state's house price or income per capita.

2.1.1 Regression Analysis of Total Title Charge

The total title charge includes all the charges relevant to title insurance, including premiums, title search, title examination, endorsement, and closing fee. The total title charge is the most comparable variable among all states. Model 1 in Table 2.1.1 illustrates the regression results comparing the difference of total title charge among all the states, using total title charge in Texas as a baseline. A negative number in Table 2.1.1 means that the total title charges in a state is less than the total title charges in Texas. The total title charge in Texas is on average significantly higher than total title charges in 44 states and District of Columbia. Only the total title charges in California, Connecticut, New Jersey and New York are higher than the total title charge in Texas. The average total title charge in California is $399.60 higher than the average total title charge in Texas. The average total title charge in Connecticut is $55.51 higher than the average total title charge in Texas. The average total title charge in New Jersey is $263.90 higher than the average total title charge in Texas. The average total title charge in New York is $151 higher than the average total title charge in Texas. After controlling for the loan amount and loan amount square, the regression results of model 2 and model 3 in Table 2.1.1 illustrate that for the same loan amount, the total title charges in Texas are significantly higher than the total title charges in 45 states and District of Columbia. Those four states that have a higher total title charge than Texas are California, Connecticut, New Jersey and New York.

Table 2.1.2 shows regression results that seeks to explain the variation of total title

charge. The models add independent variables one by one, from model 1 to model 5. Model 1 includes the loan amount as the independent variable. Model 2 adds the square of loan amount into the model. Model 3 adds four regulation types, including use and file, file and use, prior approval and promulgated rates; “no active regulation” is the baseline of comparison. Model 4 adds three services coverage, including risk premium and examination; risk premium, search and examination; and comprehensive; it takes risk premium only as the baseline. Model 5 includes two characteristics of a state, such as median income and median house price.

The regression results in Table 2.1.2 show that the relationship between loan amount and total title charge is almost linear, as the coefficient of loan amount square is very small. The negative coefficient of the variable “loan amount square” means that the rate of increasing total title charges increases before a threshold of a certain loan amount and then drops with a higher loan amount, as the property value increase, the marginal percent increase in title insurance price firstly increases and then falls. Compared to total title charge under no active regulation, only the total title charge under “promulgated rates” is a significantly higher on average, holding all else constant. The coefficient of the regulation variable means that the total title charges in a state with promulgated rates is on average $316 higher than the total title charges in a state with no active regulation. The title insurance regulation type in Texas is promulgated rates. The regression results indicate that the promulgation is a significant factor leading to increase costs; Texas’s regulation policy explains the higher total title charge in Texas

versus other states. The results of model 4 indicate that service coverage (what services are included) does not explain the variation of total title charge across all the states. Model 5 results indicate that median house price is positively and significantly associated with total title charge, which means that if the median house price increases by $100, the total title charges increase by $0.60. All these significant factors, including loan amount, square of loan amount, promulgated rates and median house price can explain 35 percent of the variation of total title charges. Other characteristics might be able to explain the remaining variation of total title charge, but other data are not available.

Table 2.1.1 Comparison of Total Title Charge Between Texas and Other States

	(1) Total title charge	(2) Total title charge	(3) Total title charge
Alabama	-839.3***	-786.0***	-788.8***
	(1.60e-11)	(6.306)	(6.070)
Alaska	-390.5***	-492.1***	-523.9***
	(1.60e-11)	(12.04)	(14.51)
Arizona	-188.1***	-217.6***	-232.2***
	(1.60e-11)	(3.499)	(4.764)
Arkansas	-782.3***	-736.5***	-735.0***
	(1.60e-11)	(5.432)	(5.465)
California	399.6***	345.9***	320.7***
	(1.62e-11)	(6.363)	(8.523)
Colorado	-549.8***	-675.6***	-700.3***
	(1.60e-11)	(14.90)	(16.59)
Connecticut	55.51***	21.94***	-9.473
	(1.60e-11)	(3.976)	(7.175)
Delaware	-740.7***	-758.6***	-766.0***
	(1.60e-11)	(2.120)	(2.741)
District of Columbia	-55.31***	-136.3***	-160.0***
	(1.60e-11)	(9.592)	(11.40)
Florida	-320.6***	-317.0***	-312.6***
	(1.60e-11)	(0.421)	(0.898)
Georgia	-698.5***	-729.8***	-742.8***
	(1.60e-11)	(3.713)	(4.793)
Hawaii	-227.4***	-288.8***	-323.6***
	(1.60e-11)	(7.275)	(10.41)
Idaho	-789.1***	-625.1***	-659.0***
	(1.60e-11)	(19.42)	(17.62)
Illinois	-492.6***	-479.6***	-469.8***
	(1.60e-11)	(1.546)	(2.484)
Indiana	-326.8***	-311.6***	-333.0***
	(1.60e-11)	(1.798)	(2.798)
Iowa	-846.2***	-826.8***	-826.4***
	(1.60e-11)	(2.295)	(2.296)
Kansas	-884.4***	-864.0***	-869.1***
	(1.60e-11)	(2.411)	(2.167)
Kentucky	-862.8***	-843.5***	-842.2***
	(1.60e-11)	(2.287)	(2.349)
Louisiana	-585.6***	-569.3***	-575.8***
	(1.60e-11)	(1.925)	(1.715)
Maine	-202.9***	-316.1***	-341.1***
	(1.60e-11)	(13.41)	(15.19)

Maryland	-338.5***	-421.3***	-441.1***
	(1.60e-11)	(9.808)	(11.24)
Massachusetts	-541.6***	-530.8***	-530.9***
	(1.60e-11)	(1.286)	(1.263)
Michigan	-563.5***	-554.7***	-562.1***
	(1.60e-11)	(1.039)	(1.109)
Minnesota	-421.7***	-484.5***	-509.2***
	(1.60e-11)	(7.439)	(9.468)
Mississippi	-890.6***	-838.6***	-840.2***
	(1.60e-11)	(6.168)	(6.002)
Missouri	-918.5***	-869.6***	-871.1***
	(1.60e-11)	(5.795)	(5.641)
Montana	-664.2***	-640.5***	-636.5***
	(1.60e-11)	(2.813)	(3.079)
Nebraska	-945.7***	-869.3***	-880.4***
	(1.60e-11)	(9.055)	(8.377)
Nevada	-349.2***	-355.6***	-394.6***
	(1.60e-11)	(0.753)	(5.985)
New Hampshire	-521.8***	-640.4***	-661.7***
	(1.60e-11)	(14.05)	(15.48)
New Jersey	263.9***	254.3***	231.3***
	(1.62e-11)	(1.137)	(3.935)
New Mexico	-550.5***	-543.7***	-539.8***
	(1.60e-11)	(0.803)	(1.155)
New York	151.0***	197.3***	177.0***
	(1.60e-11)	(5.495)	(4.916)
North Carolina	-969.3***	-940.7***	-965.5***
	(1.60e-11)	(3.398)	(3.684)
North Dakota	-1014.4***	-971.2***	-960.3***
	(1.61e-11)	(5.109)	(5.910)
Ohio	-519.4***	-516.7***	-518.6***
	(1.60e-11)	(0.315)	(0.313)
Oklahoma	-421.1***	-367.7***	-360.5***
	(1.60e-11)	(6.325)	(6.775)
Oregon	-374.7***	-433.1***	-457.5***
	(1.60e-11)	(6.927)	(8.961)
Pennsylvania	-590.2***	-542.3***	-548.0***
	(1.60e-11)	(5.682)	(5.310)
Rhode Island	-261.9***	-306.6***	-337.8***
	(1.60e-11)	(5.296)	(8.256)
South Carolina	-721.5***	-692.3***	-695.6***
	(1.60e-11)	(3.454)	(3.236)
South Dakota	-925.3***	-887.9***	-879.7***
	(1.60e-11)	(4.428)	(5.009)

Tennessee	-679.0***	-668.7***	-668.7***
	(1.60e-11)	(1.222)	(1.210)
Texas	0	0	0
	(.)	(.)	(.)
Utah	-380.0***	-436.0***	-465.3***
	(1.60e-11)	(6.631)	(9.222)
Vermont	-590.2***	-593.5***	-601.3***
	(1.60e-11)	(0.392)	(1.341)
Virginia	-418.3***	-478.9***	-492.8***
	(1.60e-11)	(7.179)	(8.174)
Washington	-41.79***	-122.1***	-143.0***
	(1.60e-11)	(9.508)	(11.06)
West Virginia	-786.9***	-745.2***	-743.8***
	(1.60e-11)	(4.934)	(4.972)
Wisconsin	-794.4***	-765.0***	-776.8***
	(1.60e-11)	(3.482)	(3.102)
Wyoming	-969.1***	-922.5***	-918.7***
	(1.60e-11)	(5.523)	(5.721)
Loan amount		0.00239***	0.00239***
		(0.000283)	(0.000280)
Loan amount square			-0.00000790***
			(0.00000114)
Constant	1695.9***	1475.3***	1531.3***
	(1.60e-11)	(26.13)	(23.46)
R^2	0.466	0.510	0.518
N	9288	9288	9288

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2.1.2 Regression Results of Variation for Total Title Charge

	(1) Total title charge	(2) Total title charge	(3) Total title charge	(4) Total title charge	(5) Total title charge
Loan Amount	0.003496***	0.00338***	0.00339***	0.00339***	0.00198***
	(0.000263)	(0.00026)	(0.000333)	(0.000321)	(0.000261)
Loan Amount Square		-0.000014***	-0.000014***	-0.000014***	-0.0000081***
		(0.000003)	(0.000002)	(0.000002)	(0.000001)
File and use			11.90	7.078	-110.6
			(82.28)	(93.01)	(70.66)
Use and file			-111.0	-110.9	-163.7*
			(99.66)	(109.1)	(82.81)
Prior approval			242.2	241.2	25.22
			(155.1)	(160.5)	(111.4)
Promulgated Rates			316.0**	281.9**	291.7*
			(136.6)	(123.8)	(146.4)
Examination & premium				-105.1	-94.40
				(147.4)	(91.06)
Examination, search & premium				-8.376	11.50
				(96.53)	(89.40)
Comprehensive				95.70	28.66
				(220.7)	(124.8)
Median income					-0.000795
					(0.00526)
Median house price					0.00585***
					(0.00108)
Constant	841.7***	932.8***	883.9***	885.4***	361.9**
	(47.00)	(51.70)	(62.73)	(84.46)	(178.8)
R^2	0.121	0.148	0.197	0.204	0.354
N	9288	9288	9288	9288	9288

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

2.1.2 Premiums Plus Endorsement

Table 2.1.3 lists regression result of the premiums plus endorsement among all states by taking Texas' total title charges as a baseline. The results in model 1 show that the premiums plus endorsements in Texas are significantly higher than the premiums plus endorsement in all other states. A negative coefficient of each state means that the premiums plus endorsement in a state is less on average than the premiums plus endorsement in Texas. For example, the coefficient of Alabama State is -734.7, which means the premiums plus endorsement in Alabama is $734.70 lower than the premiums plus endorsement in Texas on average. After controlling for the loan amount and loan amount square, the results in model 2 and model 3 show that for the same value of loan amount, the premiums plus endorsement in Texas is still significantly higher than the premiums plus endorsement in all other states. The negative coefficient of each state means that for the same loam amount, the premiums plus endorsement in this state is less on average than the premiums plus endorsement in Texas. For example, the coefficient of Alabama State is -693.1, which means that for the same loan amount, the premiums plus endorsement in Alabama is $693.10 lower than the premiums plus endorsement in Texas on average.

Table 2.1.4 lists regression results that illustrate how factors affect premium plus endorsements. The model adds independent variables, one by one, from model 1 to model 5. Model 1 includes the loan amount as the only independent variable. Model 2 adds the square of loan amount into the model. Model 3 includes four regulation types,

including use and file, file and use, prior approval and promulgated rates; “no active regulation” is the baseline of comparison. Model 4 adds three services coverage variables, (including risk premium and examination; risk premium, searching and examination; and comprehensive) with risk premium as the baseline. Model 5 adds the characteristics of state, including median income and median house price into the model. The regression results show that the relationship between loan amount and premium plus endorsement is almost linear, as the coefficient of the variable “loan amount square” is very small. The negative coefficient of loan amount square means that the rate of increasing premium plus endorsement costs firstly increases before a threshold of a certain loan amount and then drops with a higher loan amount. Compared to premiums plus endorsement under no active regulation, the premiums plus endorsement under two regulation styles, use and file and promulgated are significantly higher on average, holding other variables constant. The regression results indicate that the average premiums plus endorsement in a state with the regulation type of “Use and file” is $179.20 higher than the overage premiums plus endorsement in a state without any active regulation. The average premiums plus endorsement in a state with the regulation type of “promulgated rates” is $427.10 higher than the overage premiums plus endorsement in a state without any active regulation. The title insurance regulation type in Texas is promulgated rates. The regression results indicates that the policy of promulgated rates is a significant factor that can explain a part of the higher “premiums plus endorsement” rates that exist in Texas versus that of other states. Compared to the premiums plus endorsement that only covers risk premiums, the results of model 4

show that the premiums plus endorsements that include “risk premiums and title examination” or “risk premiums, title examination and title search” are significantly higher than the premiums plus endorsement that only includes risk premiums on average. The coefficient of the variable “comprehensive” is not statistically significant, which means that the expected average cost of premiums plus endorsements in a state that offers comprehensive service do not on average differ from states where the premiums plus endorsement includes risk premiums. Model 5 shows that a state’s median house price is positively and significantly associated with premiums plus endorsement. The coefficient of media house price means that if the median house price increase by $100, the total title charges increase by $0.20. All these significant factors (including loan amount, square of loan amount, use and file, promulgated regulation, premiums & examination, premium, examination & searching and median house price) explain 39 percentage of the variation of premiums plus endorsement. Other characteristics might explain the remaining variation of total title charge, but such supplementary data are not available.

Table 2.1.3 Comparison of Premiums Plus Endorsement Between Texas and Other States

	(1) Premiums plus endorsement	(2) Premiums plus endorsement	(3) Premiums plus endorsement
Alabama	-734.7***	-693.1***	-695.1***
	(1.89e-12)	(4.031)	(3.838)
Alaska	-135.0***	-214.5***	-237.7***
	(1.82e-12)	(7.695)	(8.894)
Arizona	-102.8***	-125.9***	-136.5***
	(2.02e-12)	(2.237)	(2.867)
Arkansas	-629.4***	-593.5***	-592.4***
	(1.82e-12)	(3.473)	(3.440)
California	-41.11***	-83.13***	-101.4***
	(2.57e-12)	(4.068)	(5.141)
Colorado	-294.2***	-392.6***	-410.5***
	(1.86e-12)	(9.522)	(10.30)
Connecticut	-593.8***	-620.1***	-642.9***
	(1.83e-12)	(2.541)	(4.156)
Delaware	-708.6***	-722.6***	-728.0***
	(1.83e-12)	(1.355)	(1.662)
District of Columbia	-537.8***	-601.1***	-618.4***
	(1.83e-12)	(6.131)	(7.006)
Florida	-280.5***	-277.7***	-274.5***
	(1.88e-12)	(0.269)	(0.511)
Georgia	-742.3***	-766.8***	-776.3***
	(1.86e-12)	(2.373)	(2.908)
Hawaii	-642.8***	-690.8***	-716.1***
	(1.83e-12)	(4.651)	(6.216)
Idaho	-1029.6***	-901.3***	-926.0***
	(2.64e-12)	(12.42)	(11.13)
Illinois	-268.1***	-257.9***	-250.9***
	(1.86e-12)	(0.989)	(1.460)
Indiana	-415.6***	-403.7***	-419.2***
	(1.85e-12)	(1.149)	(1.457)
Iowa	-625.4***	-610.2***	-609.9***
	(1.85e-12)	(1.467)	(1.447)
Kansas	-575.8***	-559.9***	-563.6***
	(1.83e-12)	(1.541)	(1.365)
Kentucky	-792.8***	-777.7***	-776.8***
	(1.83e-12)	(1.462)	(1.475)
Louisiana	-720.8***	-708.1***	-712.8***
	(1.85e-12)	(1.231)	(1.060)
Maine	-588.1***	-676.7***	-694.9***

	(1.83e-12)	(8.575)	(9.403)
Maryland	-560.9***	-625.7***	-640.1***
	(1.82e-12)	(6.269)	(6.948)
Massachusetts	-700.8***	-692.3***	-692.4***
	(1.83e-12)	(0.822)	(0.797)
Michigan	-403.9***	-397.0***	-402.4***
	(1.85e-12)	(0.664)	(0.622)
Minnesota	-625.8***	-674.9***	-692.9***
	(1.85e-12)	(4.756)	(5.756)
Mississippi	-823.1***	-782.4***	-783.5***
	(1.83e-12)	(3.943)	(3.791)
Missouri	-661.5***	-623.3***	-624.3***
	(1.84e-12)	(3.704)	(3.563)
Montana	-370.0***	-351.5***	-348.5***
	(1.86e-12)	(1.798)	(1.916)
Nebraska	-726.6***	-666.8***	-674.9***
	(1.85e-12)	(5.788)	(5.302)
Nevada	-296.0***	-300.9***	-329.3***
	(1.83e-12)	(0.481)	(3.183)
New Hampshire	-613.0***	-705.8***	-721.3***
	(1.82e-12)	(8.984)	(9.626)
New Jersey	-132.2***	-139.7***	-156.4***
	(1.93e-12)	(0.727)	(2.156)
New Mexico	-336.2***	-330.9***	-328.1***
	(1.86e-12)	(0.513)	(0.689)
New York	-217.3***	-181.0***	-195.8***
	(1.83e-12)	(3.512)	(3.018)
North Carolina	-962.6***	-940.2***	-958.3***
	(2.29e-12)	(2.172)	(2.055)
North Dakota	-877.7***	-844.0***	-836.0***
	(2.51e-12)	(3.266)	(3.647)
Ohio	-574.6***	-572.5***	-573.9***
	(1.83e-12)	(0.201)	(0.180)
Oklahoma	-783.7***	-741.9***	-736.6***
	(1.85e-12)	(4.043)	(4.229)
Oregon	-387.0***	-432.7***	-450.5***
	(1.87e-12)	(4.428)	(5.434)
Pennsylvania	-279.0***	-241.4***	-245.6***
	(1.84e-12)	(3.632)	(3.362)
Rhode Island	-629.7***	-664.7***	-687.4***
	(1.83e-12)	(3.386)	(4.873)
South Carolina	-822.2***	-799.4***	-801.8***
	(1.82e-12)	(2.208)	(2.048)
South Dakota	-644.6***	-615.4***	-609.4***

	(1.83e-12)	(2.830)	(3.102)
Tennessee	-628.0***	-619.9***	-619.9***
	(1.88e-12)	(0.781)	(0.763)
Utah	-115.4***	-159.2***	-180.5***
	(2.14e-12)	(4.239)	(5.532)
Vermont	-829.5***	-832.1***	-837.8***
	(1.83e-12)	(0.250)	(0.735)
Virginia	-507.4***	-554.8***	-564.9***
	(1.83e-12)	(4.589)	(5.057)
Washington	-270.3***	-333.1***	-348.3***
	(1.84e-12)	(6.078)	(6.817)
West Virginia	-823.9***	-791.3***	-790.3***
	(1.91e-12)	(3.154)	(3.130)
Wisconsin	-529.6***	-506.6***	-515.1***
	(1.83e-12)	(2.226)	(1.918)
Wyoming	-574.0***	-537.5***	-534.8***
	(1.82e-12)	(3.530)	(3.588)
Loan amount		0.00187***	0.00187***
		(0.000181)	(0.000177)
Loan amount square			-0.00000575***
			(0.000000594)
Constant	1111.4***	938.8***	979.6***
	(1.82e-12)	(16.70)	(14.77)
N	9288	9288	9288
R^2	0.631	0.698	0.708

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2.1.4 Regression Result of Variation of Premiums Plus Endorsement

	(1) Premium plus endorsement	(2) Premium plus endorsement	(3) Premium plus endorsement	(4) Premium plus endorsement	(5) Premium plus endorsement
Loan amount	0.00252***	0.00246***	0.00242***	0.00235***	0.00168***
	(0.000302)	(0.000315)	(0.000293)	(0.000299)	(0.000250)
Loan amount square		-0.000007***	-0.000008***	-0.000008***	-0.000005***
		(0.0000019)	(0.0000017)	(0.0000015)	(0.0000011)
File and use			76.26	96.36	43.07
			(62.72)	(57.73)	(50.72)
Use and file			179.2*	159.2**	120.0*
			(102.8)	(65.65)	(60.94)
Prior approval			59.31	67.82	-36.15
			(133.0)	(144.1)	(138.2)
Promulgated rates			427.1***	460.9***	479.3***
			(93.89)	(80.51)	(78.68)
Premium & Examination				118.7*	124.4***
				(59.13)	(42.21)
Premium, examination & searching				200.8**	200.2**
				(93.42)	(95.00)
Comprehensive				31.73	23.15
				(141.0)	(101.7)
Median income					0.00565
					(0.00510)
Median house price					0.00199**
					(0.000962)
Constant	345.6***	390.8***	313.5***	277.8***	-126.2
	(42.27)	(46.94)	(52.86)	(53.74)	(156.5)
N	9288	9288	9288	9288	9288
R^2	0.153	0.170	0.268	0.308	0.387

Robust and state cluster standard errors in parentheses

$p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Summary of Title Insurance Analysis Based on BOA Database

The Bank of America Database was computed a set of quotations on Bank of America (BOA) website in 2016 (https://www.bankofamerica.com). The closing cost quotations on Bank of America website (BOA) come from "closing costs calculator" of Bank of American. The BOA website lists title insurance related fees, such as closing/escrow fee, owner's title insurance, lender's title insurance and title insurance endorsement for two different purchase prices ($200,000 purchase price and $400,000 purchase price). The sum of lender's title insurance and endorsements costs represents the dependent variable in this study.

This study evaluates a series of hypotheses to assess why lender's title insurance plus endorsements costs vary among states; it seeks to explain the different prices of lender's title insurance plus endorsements costs among all states. Four sets of potential independent variables are tested in the report: loan amount; premium regulation types; title premium service coverage; and state characteristics.

The lender's title insurance plus endorsement in Texas is significantly higher than the lender's title insurance plus endorsement in all the other states. The regression results show that regulation type is the most significant independent variable to explain the different lender's title insurance and endorsements across the states. The lender's title insurance plus endorsements costs in the states with promulgated rates, such as Texas,

are $828.50 higher than lender's title insurance plus endorsement in the states without any active regulation, holding all else constant. An explanation is that state promulgation of minimum title rates set a floor in title insurance; regulation decreases the level of competition and leads to high costs. Therefore, Texas's regulation policy explains the higher total title charge and premiums plus endorsements in Texas versus other states. The different degrees of service coverage (what services are included) are not statistically significant, which means that the expected cost of lender's title insurance plus endorsement that includes more service coverage is the same as the lender's title insurance plus endorsement that only includes risk premiums. Neither median income nor median house price help explain the variation among all states of the lender's title insurance plus endorsement. All these factors (loan amount, promulgated rates, premiums & examination, comprehensive services) can explain 45 percent of the variation of lender's title insurance plus endorsement.

2.2 Bank of America Data Analysis

2.2.1 Data

The database used for the study is a set of quotations derived from a Bank of America (BOA) website in 2016 (https://www.bankofamerica.com). The BOA "closing costs calculator" on the Bank of American website allow a user to obtain a quote for closing costs. After answering several questions, including property zip code, purchase price, down payment, loan term and loan type, a user can obtain the details an estimate of closing costs. Under the item of third-party fees, it shows the title insurance related fees, such as closing/escrow fee, owner's title insurance, lender's title insurance and title insurance endorsement. To compare values among the states, this study computed title related costs based on a zip code in the capital city of each state, two different purchase prices ($200,000 purchase price and $400,000 purchase price), a 10 percent down payment, a 30-year loan and fixed rate loan. Table 2.2.1 lists each capital city and zip code used to obtain a set of state title related quotations. Table 2.2.2 lists the closing/escrow fee, owner's title insurance, lender's title insurance and title insurance endorsement for $200,000 property value for each state. Table 2.2.3 lists the closing/escrow fee, owner's title insurance, lender's title insurance and title insurance endorsement for a property value of $400,000 for each state.

Table 2.2.1 Capital City and Zip Code of Each State for Searching

State	Capital	Zip code	State	Capital	Zip code
Alabama	Montgomery	36111	Missouri	Jefferson City	65101
Alaska	Juneau	99801	Montana	Helena	59601
Arizona	Pheonix	85009	Nebraska	Lincoln	68501
Arkansas	Little Rock	72205	Nevada	Carson City	89701
California	Sacremento	95815	New Hampshire	Concord	3301
Colorado	Denver	80223	New Jersey	Trenton	8601
Connecticut	Hartford	6120	New Mexico	Santa Fe	87501
Delaware	Dover	19902	New York	Albany	12202
Disrict of Columia	Washington	20002	North Carolina	Raleigh	27601
Florida	Tallahassee	32301	North Dakota	Bismarck	58501
Georgia	Atlanta	30311	Ohio	Columbus	43085
Hawaii	Honolulu	96821	Oklahoma	Oklahoma City	73102
Idaho	Boise	83709	Oregon	Salem	97301
Illinois	Springfield	62701	Pennsylvania	Hariisburg	17101
Indiana	Indianapolis	46225	Rhode Island	Providence	2901
Iowa	Des Moines	50315	South Carolina	Columbia	29202
Kansas	Topeka	66622	South Dakota	Pierre	57501
Kentucky	Frankfort	40604	Tennessee	Nashville	37201
Louisiana	Baton Rouge	70815	Texas	Austin	78727
Maine	Augusta	4330	Utah	Salt Lake City	84101
Maryland	Annapolis	21401	Vermont	Montpelier	5602
Massachusetts	Boston	2210	Virginia	Richmond	23219
Michigan	Lansing	48933	Washington	Olympia	98502
Minnesota	St. Paul	55103	West Virginia	Charleston	25302
Mississippi	Jackson	39204	Wisconsin	Madison	53711
			Wyoming	Cheyenne	82002

Table 2.2.2 Title Related Quotations on a BOA Website for $200,000 Property Value

State	Owner's Title Insurance	Lender's Title Insurance	Endorsements	Escrow Fee
Alabama	100	1,429	50	530
Alaska	75	970	50	255
Arizona	663	1224	76	372
Arkansas	160	448	0	212
California	645	425	26	675
Colorado	190	1,243	69	175
Connecticut	45	705	0	750
Delaware	290	585	100	650
District of Columbia	390	900	0	382
Florida	25	1,078	50	238
Georgia	300	500	0	725
Hawaii	250	894	0	600
Idaho	374	1,295	55	255
Illinois	500	1,525	120	625
Indiana	474	189	100	320
Iowa	0	110	0	660
Kansas	342	470	26	130
Kentucky	578	615	0	375
Louisiana	326	770	200	885
Maine	300	350	26	600
Maryland	430	590	0	815
Massachusetts	475	500	0	750
Michigan	949	674	0	500
Minnesota	150	600	0	650
Mississippi	300	600	0	262
Missouri	135	400	0	180
Montana	297	1070	65	190
Nebraska	75	608	50	162
Nevada	1078	615	0	378
New Hampshire	162	362	50	575
New Jersey	25	950	50	975
New Mexico	162	1193	275	170
New York	316	1018	57	525
North Carolina	25	365	40	640
North Dakota	200	480	0	720
Ohio	425	762	175	205
Oklahoma	310	475	100	360
Oregon	310	910	100	610
Pennsylvania	185	1215	175	200
Rhode Island	125	475	0	850

South Carolina	100	540	0	725
South Dakota	175	400	25	0
Tennessee	348	931	0	168
Texas	100	1429	50	530
Utah	1052	789	40	135
Vermont	225	495	0	700
Virginia	350	580	50	660
Washington	622	1349	0	449
West Virginia	250	530	0	550
Wisconsin	300	830	0	295
Wyoming	208	832	60	175

Table 2.2.3 Title Related Quotations on a BOA Website for $400,000 Property Value

State	Escrow Fee	Owner's Title Insurance	Lender's Title Insurance	Endorsements
Alabama	530	100	2,537	50
Alaska	255	75	1,630	50
Arizona	372	1001	1,848	76
Arkansas	212	200	848	0
California	675	917	625	26
Colorado	175	190	1,613	69
Connecticut	750	95	1,255	0
Delaware	650	550	1,105	100
District of Columbia	382	630	1,710	0
Florida	238	25	2078	50
Georgia	725	500	950	0
Hawaii	600	250	1672	0
Idaho	255	548	2,046	55
Illinois	625	500	1,925	120
Indiana	320	774	289	100
Iowa	660	0	110	0
Kansas	130	330	722	26
Kentucky	375	1320	1,145	0
Louisiana	885	566	1430	200
Maine	600	550	700	26
Maryland	815	665	1135	0
Massachusetts	750	775	1000	0
Michigan	500	1456	1024	0
Minnesota	650	200	1012	0
Mississippi	262	500	1200	0
Missouri	180	185	750	0
Montana	190	417	1590	65
Nebraska	162	75	1008	50
Nevada	378	1596	902	0
New Hampshire	575	212	712	50
New Jersey	975	25	1800	50
New Mexico	170	261	2082	275
New York	525	549	1746	80
North Carolina	640	25	685	40
North Dakota	720	260	900	0
Ohio	205	638	1300	175
Oklahoma	360	360	825	100
Oregon	610	445	1495	100
Pennsylvania	200	335	2065	175
Rhode Island	850	225	875	0

South Carolina	725	100	960	0
South Dakota	0	225	750	25
Tennessee	168	618	1561	0
Texas	530	100	2537	50
Utah	135	1743	1307	40
Vermont	700	385	935	0
Virginia	660	550	1130	50
Washington	449	790	1995	0
West Virginia	550	450	1010	0
Wisconsin	295	300	1230	0
Wyoming	175	336	1342	60

2.2.2 Descriptive Analysis

As not all the states include all title insurance endorsements within the premium, this section investigates two additional measurements to allow a reasonable comparison across the states: a lender's title insurance plus title insurance endorsement and a closing/escrow fee plus insurance endorsement. In several states, the quotations of owner's title insurance on the BOA website are discounted prices when consumers purchase both lender's title insurance and owner's title insurance. In several other states, the owner's title insurance is a separate quotation. For example, a $100 owner's title insurance quotation in Texas in the database represents the mandated sequential marginal costs for a lender's policy when a consumer first purchases an owner's title insurance and then a lender's title insurance. Figure 2.2.1 to Figure 2.2.3 illustrate the comparisons of lender's title insurance, lender's title insurance plus title insurance endorsement and closing/escrow fee plus insurance endorsement for a $200,000 property value for each state. Figure 2.2.4 to Figure 2.2.6 illustrate the comparisons of lender's title insurance, lender's title insurance plus title insurance endorsement and closing/escrow fee plus insurance endorsement for a $400,000 property value for each state.

Texas has the second highest lender's title insurance ($1,429) across 50 states and District of Columbia for a $200,000 property value. The top ten states with highest quotation of lender's title insurance for $200,000 property values are Illinois, Texas, Alabama, Washington, Idaho, Colorado, Arizona, Pennsylvania, New Mexico and

Florida. A possible explanation could be the title insurance charges in these states cover more services. For a $400,000 property value, the lender's title insurance in Texas ($2,573) is the highest in the U.S. The top ten states with highest quotation of lender's title insurance for a $400,000 property values are Texas, Alabama, New Mexico, Florida, Pennsylvania, Idaho, Washington, Illinois, Arizona, and New Jersey. After adding the endorsement to the lender's title insurance for both loans about ($200,000 and $400,000), the lender's title insurance plus endorsement in Texas ($1,479) remains the second highest quotation in the U.S for a $200,000 loan amount and also the highest ($2,587) price for a $400,000 loan amount. The very high cost of lender's title insurance plus endorsement might be explained by several factors, such as regulation styles, service coverage and median house price. Therefore, next section seeks to test whether the lender's title insurance plus endorsement in Texas is higher than that of other states and possible factors that affect the lender's title insurance plus endorsement uses regression to test.

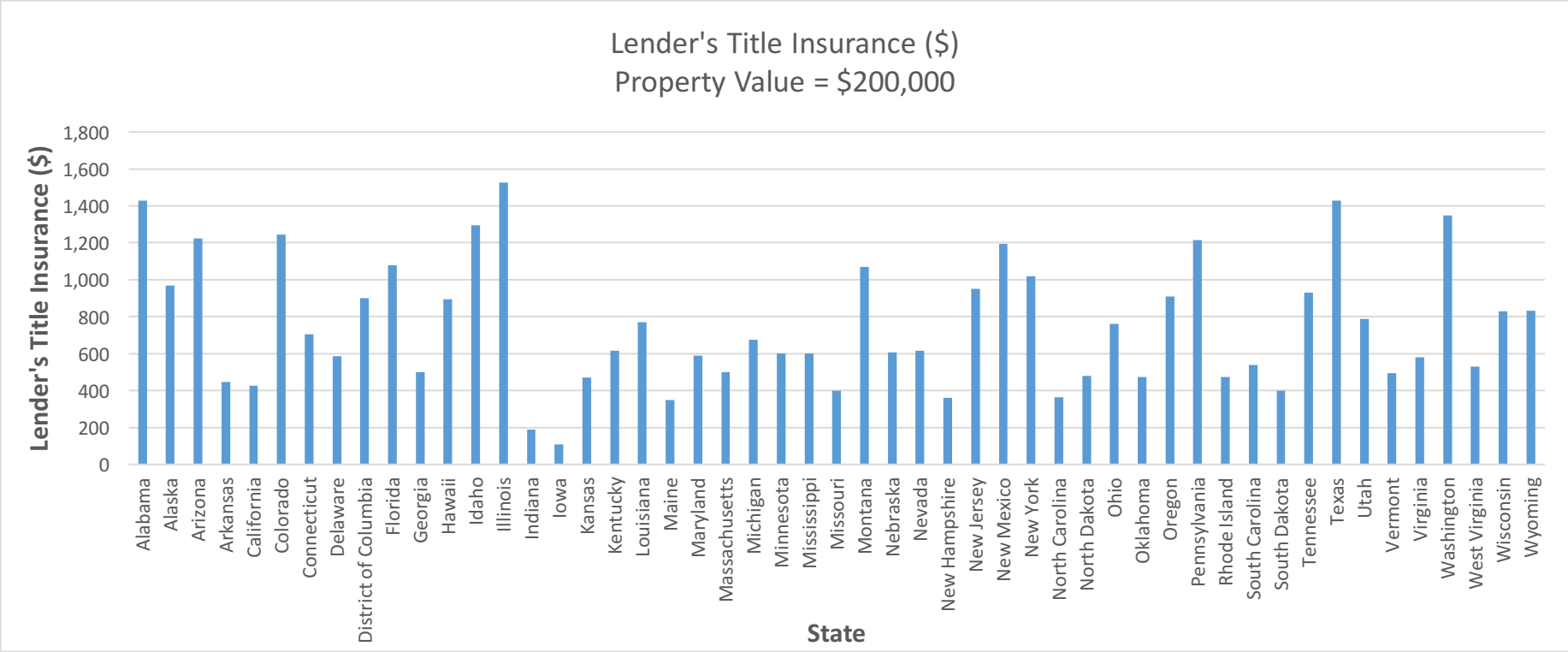


Figure 2.2.1 Lender's Title Insurance for a $200,000 Property Value

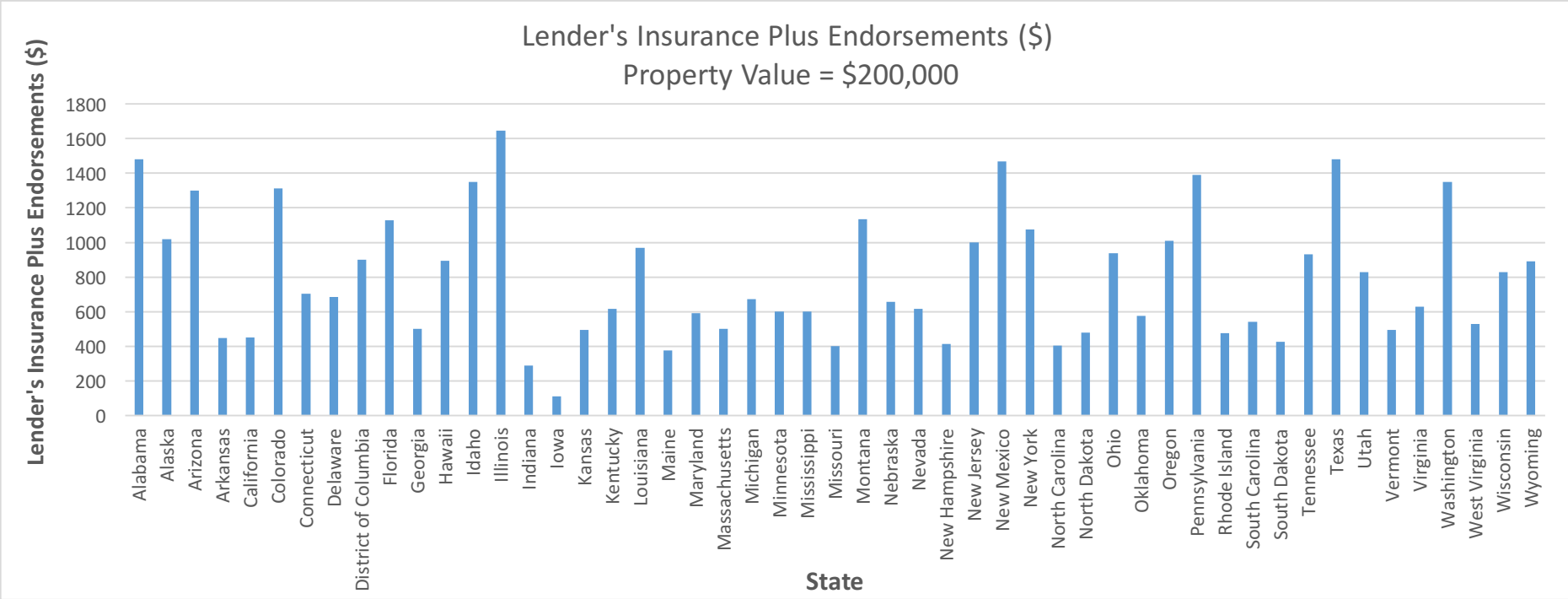


Figure 2.2.2 Lender's Insurance Plus Endorsements for a $200,000 property Value

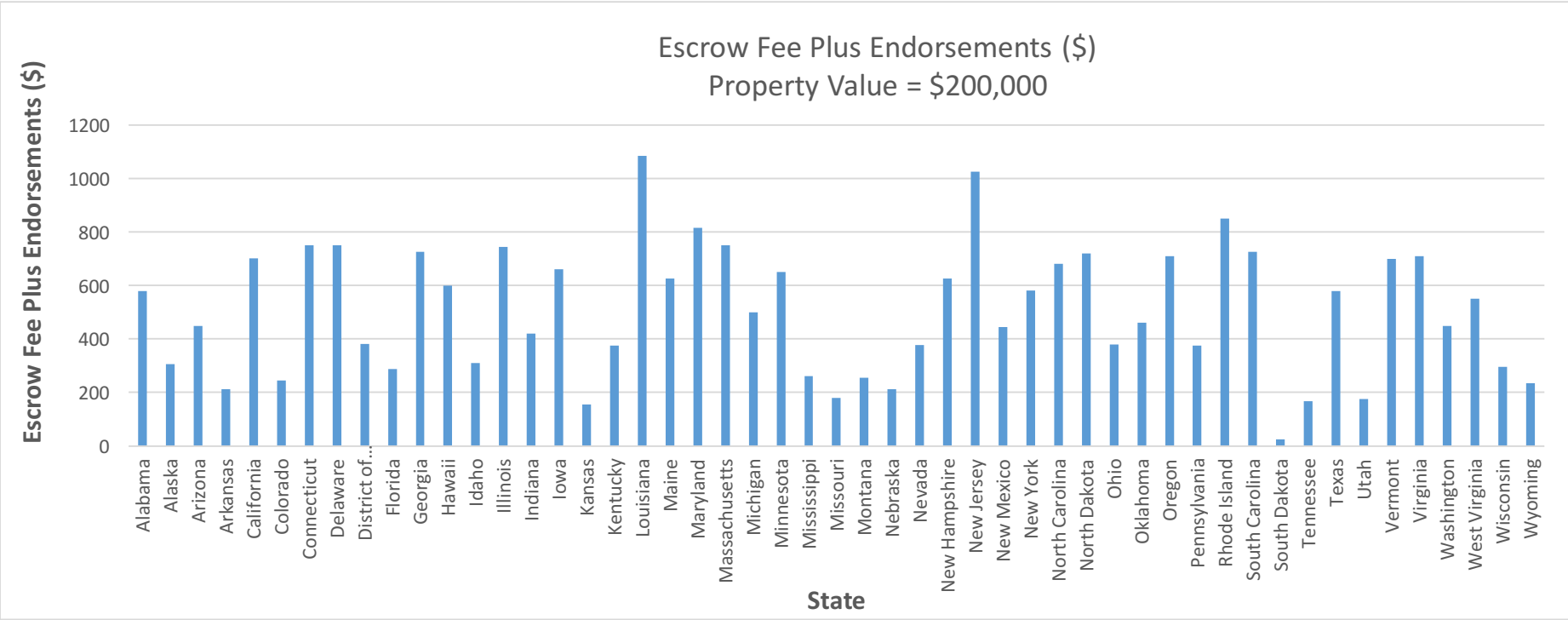


Figure 2.2.3 Escrow Fee Plus Endorsements ($) for a $200,000 Property Value

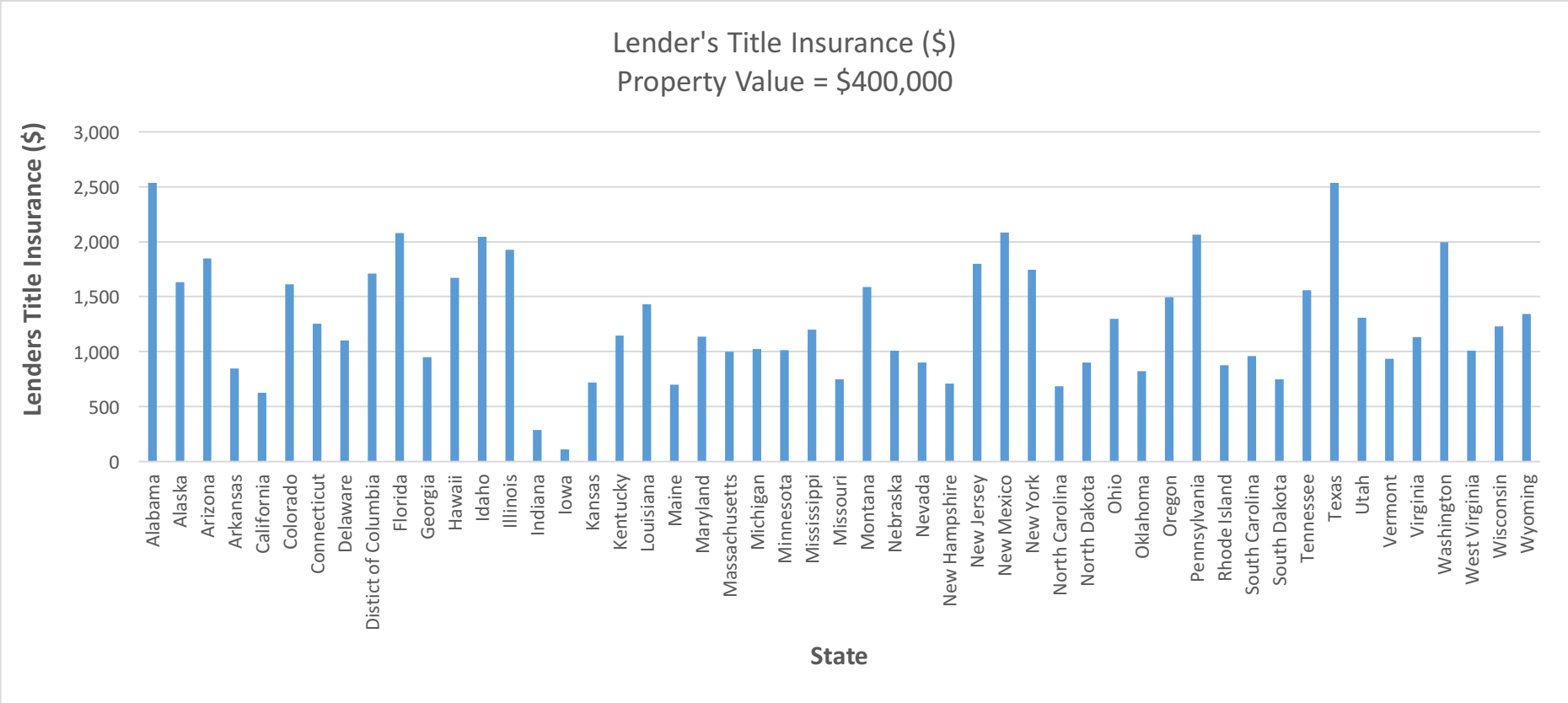


Figure 2.2.4 Lender's Title Insurance ($) for a $400,000 Property Value

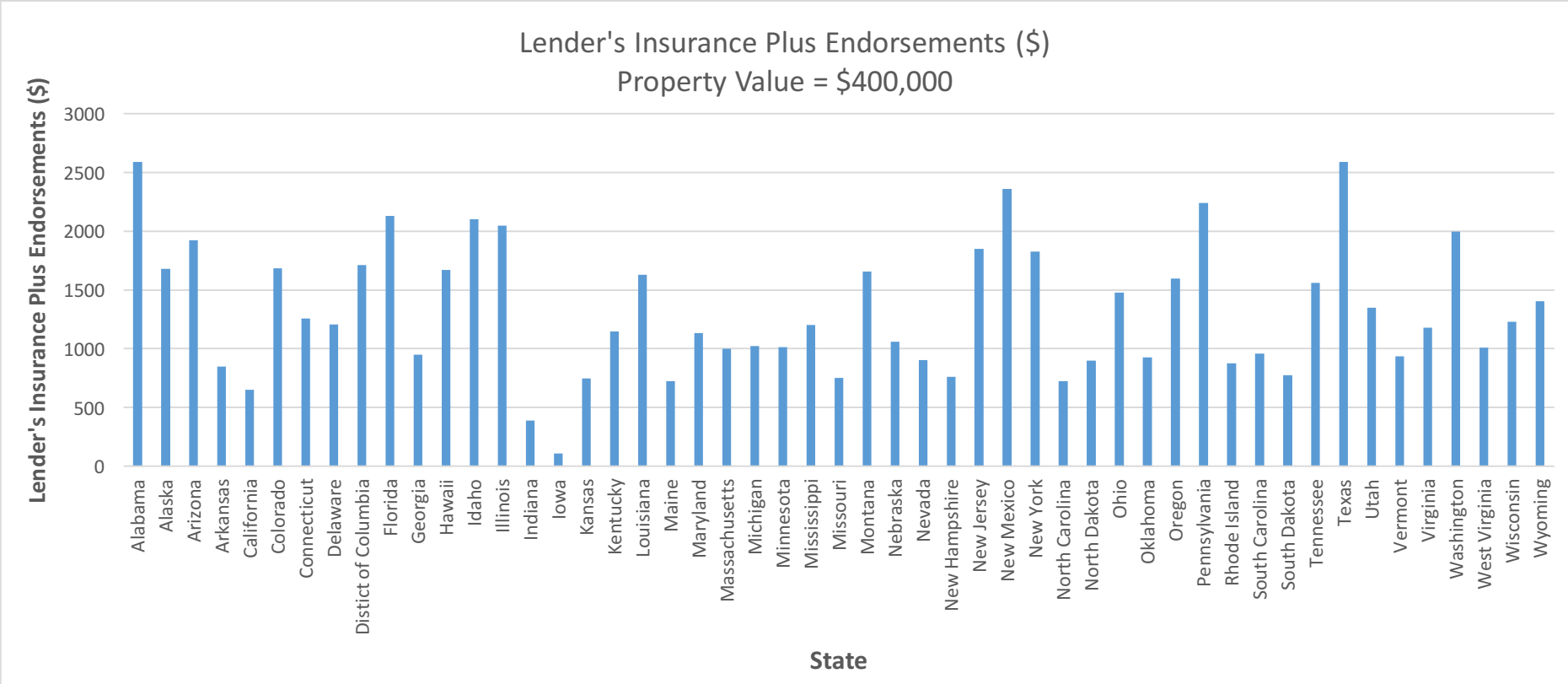


Figure 2.2.5 Lender's Insurance Plus Endorsement ($) for a $400,000 Property Value

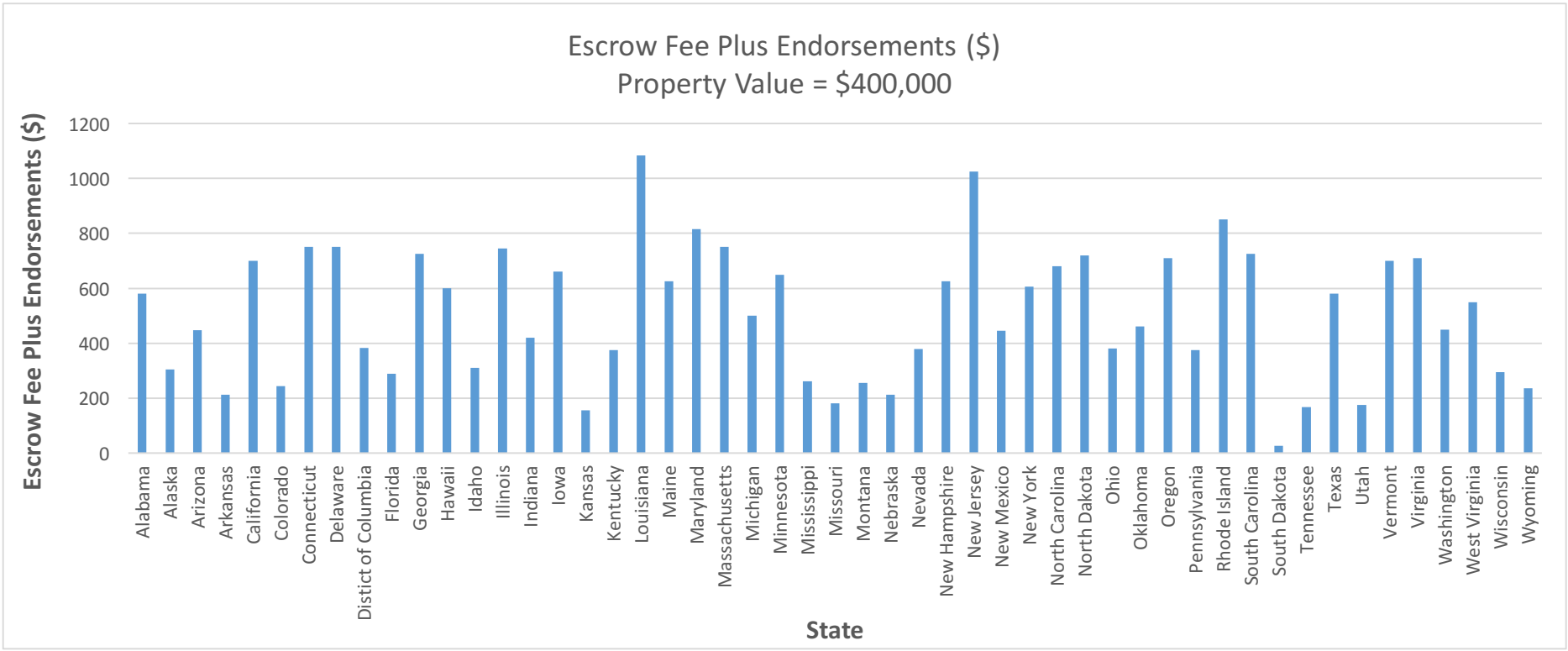


Figure 2.2.6 Escrow Fee Plus Endorsement ($) for a $400,000 Property Value

2.2.3 Regression Analysis

Table 2.2.4 and Table 2.2.5 list the regression results based on the BOA quotation data. The dependent variable is the sum of costs of lender's title insurance and endorsements, based on BOA quotations. Model 1 results indicate that the lender's title insurance plus endorsement in Texas is significantly higher than the lender's title insurance plus endorsement in all the other states. The negative coefficient of each state means that the lender's title insurance plus endorsement in this state is on average less than the lender's title insurance plus endorsement in Texas. For example, the coefficient of New York State is -582.5 which means the lender's title insurance plus endorsement in New York is $582.50 lower on average than the lender's title insurance plus endorsement in Texas. The insurance quotations on the BOA websites are for a $200,000 loan amount and a $400,000 loan amount. After controlling for the loan amount, model 2 results indicate that for the same value of loan amount, the expected cost of a lender's title insurance plus endorsement in Texas is still significantly higher than the lender's title insurance plus endorsement in all other states. The negative coefficient of each state means that for a same loan amount, on average the lender's title insurance plus endorsement in this state is less than the lender's title insurance plus endorsement in Texas. For example, the coefficient of New York State is -582.5 which means that for a same loan amount, the lender's title insurance plus endorsement in New York is on average $582.50 lower than the lender's title insurance plus endorsement in Texas. The lender's title insurance

plus endorsement for loan amount $400,000 is significantly higher than that of loan amount $200,000.

Table 2.2.4 represents the results from four regression models to seek to explain the variation of lender's title insurance plus endorsement, adding the independent variables one by one from model 1 to model 4. Model 1 only includes the loan amount as the independent variable. Model 2 adds four regulation types: use and file; file and use; prior approval and promulgated rates; "no active regulation" is the baseline of comparison. Model 3 adds three services coverage: risk premium and examination; risk premium, search and examination; and comprehensive, with risk premium only as the baseline. The characteristics of a state are added into Model 4, including a state's median income and median house price. The regression results show that lender's title insurance plus endorsement for $400,000 loan amount is significantly higher than that of $200,000 loan amount. The results of model 2 show that lender's title insurance plus endorsements in the states with promulgated rates are significantly higher than lender's title insurance plus endorsement in the states without any active regulation, holding all else constant. The coefficient of "promulgated" means that the average lender's title insurance plus endorsement in a state with the regulation type of "promulgated rates" is $828.50 higher than the overage lender's title insurance plus endorsement in a state without any active regulation. States with other regulation types (use and file, prior approval and file and use) have lender's title insurance plus endorsement costs that do not differ significantly with the lender's title insurance plus endorsement in the states

without any active regulation. As Texas uses promulgated rate, higher lender's title insurance plus endorsement in Texas can be explained by the promulgated rate. Results of model 3 show that the coefficients of different degrees of service coverage (what services are included) are not statistically significant, which means that the expected cost of lender's title insurance that includes more service coverage is the same as the lender's title insurance that only includes risk premiums. The results of model 4 show that neither median income nor median house price could help explain the variation among all states of the lender's title insurance plus endorsement. All these factors (loan amount, promulgated rates, premiums & examination, comprehensive services) can explain 45 percent of the variation of lender's title insurance plus endorsement. About 55 percent of the variation of lender's title insurance plus endorsement cannot be explained by these four models. Maybe other factors could explain the remaining variation, but no additional database are available.

Table 2.2.4 Compare Lender's Insurance Plus Endorsement Between Texas and Other States

	(1) Lender's insurance plus endorsement	(2) Lender's insurance plus endorsement
Alabama	-1.53e-12	-1.53e-12
	(2.63e-12)	(2.29e-12)
Alaska	-683.0***	-683.0***
	(2.66e-12)	(2.31e-12)
Arizona	-421.0***	-421.0***
	(2.59e-12)	(2.31e-12)
Arkansas	-1385.0***	-1385.0***
	(2.59e-12)	(2.29e-12)
California	-1482.0***	-1482.0***
	(2.59e-12)	(2.29e-12)
Colorado	-536.0***	-536.0***
	(2.59e-12)	(2.28e-12)
Connecticut	-1053.0***	-1053.0***
	(2.59e-12)	(2.31e-12)
Delaware	-1088.0***	-1088.0***
	(2.59e-12)	(2.29e-12)
District of Columbia	-728.0***	-728.0***
	(2.59e-12)	(2.31e-12)
Florida	-405.0***	-405.0***
	(2.59e-12)	(2.28e-12)
Georgia	-1308.0***	-1308.0***
	(2.59e-12)	(2.29e-12)
Hawaii	-750.0***	-750.0***
	(2.66e-12)	(2.31e-12)
Idaho	-307.5***	-307.5***
	(2.63e-12)	(2.28e-12)
Illinois	-188.0***	-188.0***
	(2.63e-12)	(2.28e-12)
Indiana	-1694.0***	-1694.0***
	(2.66e-12)	(2.31e-12)
Iowa	-1923.0***	-1923.0***
	(2.59e-12)	(2.31e-12)
Kansas	-1411.0***	-1411.0***
	(2.59e-12)	(2.29e-12)
Kentucky	-1153.0***	-1153.0***
	(2.59e-12)	(2.31e-12)
Louisiana	-733.0***	-733.0***
	(2.66e-12)	(2.31e-12)
Maine	-1482.0***	-1482.0***

	(2.59e-12)	(2.31e-12)
Maryland	-1170.5***	-1170.5***
	(2.59e-12)	(2.31e-12)
Massachusetts	-1283.0***	-1283.0***
	(2.59e-12)	(2.31e-12)
Michigan	-1184.0***	-1184.0***
	(2.59e-12)	(2.29e-12)
Minnesota	-1227.0***	-1227.0***
	(2.66e-12)	(2.31e-12)
Mississippi	-1133.0***	-1133.0***
	(2.59e-12)	(2.29e-12)
Missouri	-1458.0***	-1458.0***
	(2.59e-12)	(2.29e-12)
Montana	-638.0***	-638.0***
	(2.59e-12)	(2.31e-12)
Nebraska	-1175.0***	-1175.0***
	(2.59e-12)	(2.29e-12)
Nevada	-1274.5***	-1274.5***
	(2.59e-12)	(2.34e-12)
New Hampshire	-1446.0***	-1446.0***
	(2.59e-12)	(2.29e-12)
New Jersey	-608.0***	-608.0***
	(2.59e-12)	(2.31e-12)
New Mexico	-120.5***	-120.5***
	(2.63e-12)	(2.28e-12)
New York	-582.5***	-582.5***
	(2.59e-12)	(2.28e-12)
North Carolina	-1468.0***	-1468.0***
	(2.59e-12)	(2.31e-12)
North Dakota	-1343.0***	-1343.0***
	(2.59e-12)	(2.29e-12)
Ohio	-827.0***	-827.0***
	(2.66e-12)	(2.31e-12)
Oklahoma	-1283.0***	-1283.0***
	(2.59e-12)	(2.31e-12)
Oregon	-730.5***	-730.5***
	(2.59e-12)	(2.28e-12)
Pennsylvania	-218.0***	-218.0***
	(2.59e-12)	(2.31e-12)
Rhode Island	-1358.0***	-1358.0***
	(2.59e-12)	(2.29e-12)
South Carolina	-1283.0***	-1283.0***
	(2.59e-12)	(2.31e-12)
South Dakota	-1433.0***	-1433.0***

	(2.59e-12)	(2.31e-12)
Tennessee	-787.0***	-787.0***
	(2.59e-12)	(2.31e-12)
Texas	0	0
	(.)	(.)
Utah	-945.0***	-945.0***
	(2.59e-12)	(2.29e-12)
Vermont	-1318.0***	-1318.0***
	(2.59e-12)	(2.29e-12)
Virginia	-1128.0***	-1128.0***
	(2.59e-12)	(2.29e-12)
Washington	-361.0***	-361.0***
	(2.59e-12)	(2.28e-12)
West Virginia	-1263.0***	-1263.0***
	(2.59e-12)	(2.29e-12)
Wisconsin	-1003.0***	-1003.0***
	(2.59e-12)	(2.31e-12)
Wyoming	-886.0***	-886.0***
	(2.59e-12)	(2.29e-12)
Loan amount is $400,000		526.1***
		(45.83)
Constant	2033.0***	1769.9***
	(2.59e-12)	(22.91)
Observations	102	102
R^2	0.719	0.956

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2.2.5 Regression Results of the Variation of Lender's Insurance Plus Endorsement

	(1) Lender plus endorsement	(2) Lender plus endorsement	(3) Lender plus endorsement	(4) Lender plus endorsement
Loan amount is $400,000	526.1***	526.1***	526.1***	526.1***
	(32.40)	(33.07)	(33.60)	(33.97)
Use and file		164.0	-42.11	28.32
		(156.1)	(227.1)	(251.9)
File and use		124.0	22.50	29.61
		(183.5)	(207.8)	(205.9)
Prior approval		265.6	142.2	162.0
		(179.9)	(210.1)	(210.2)
Promulgated		991.8***	835.7***	828.5***
		(186.2)	(223.5)	(246.6)
Premiums & examination			-242.2	-231.4
			(174.1)	(207.0)
Premiums, search and examination			32.06	70.97
			(115.2)	(108.4)
Comprehensive			181.9	189.1
			(145.7)	(146.7)
Median house price				0.00126
				(0.000989)
Median income				-0.00828
				(0.00703)
Constant	796.1***	602.9***	627.2***	836.0**
	(52.21)	(151.6)	(169.5)	(372.3)
Observations	102	102	102	102
R^2	0.237	0.403	0.427	0.446

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Summary of Title Insurance Analysis Based on Stewart Database

The title insurance quotations from Stewart Title's Rate Calculator website (https://www.stewartratecalculator.com/) provides quotations of owner's policy, lender's policy, simultaneous owner's title insurance and simultaneous lender's title insurance for five loan amount values: $200,000, $400,000, $600,000, $800,000 and $1,000,000 for year 2016. This study also uses the quotations of owner's policy for two loan amount values: $200,000 and $400,000 for year 2010 and year 2016.

When the loan amount is $200,000 in 2016, for a lender's title insurance alone, Texas has the highest title cost ($1,429) across all the states. For an owner's title insurance alone, Texas' title rate is the second highest ($1,429) quotation across all the states in 2016, but there is no significant difference between Texas' rate with the highest quotation in the U.S. (Illinois: $1,550). For the total title insurance when a consumer purchases both lender's title insurance and owner's title insurance (hereafter referred to as simultaneous title insurance) in 2016, Texas has the fourth highest simultaneous title insurance quotation ($1,529) across all states. The three states with the highest quotations of simultaneous title insurance are Illinois, Michigan and Utah. When the loan amount is $400,000, Texas has the highest quotation of a lender's title insurance alone and an owner's title insurance alone. As to the simultaneous title insurance quotation, Utah has the highest quotation ($2,794) and Texas has the second highest quotation ($2,737), but there is no significant difference between these two highest

quotations. When the loan amount rises to $600,000, $800,000 and $1,000,000. Texas has the highest quotation for (a) lender's title insurance alone, (b) owner's title insurance alone, as well as (c) simultaneous title insurance.

This study evaluates a series of hypotheses to assess why owner's title insurance, lender's title insurance and simultaneous title insurance (owners and lenders) vary among states; it seeks to explain the different prices of owner's title insurance, lender's title insurance and simultaneous title insurance among all states. Four sets of potential independent variables are tested in the report: loan amount; premium regulation types; title premium service coverage; and state characteristics. The regression results show that regulation type is the independent variable that best explains the different title related charges across the states. The states with promulgated rate, such as Texas, have significantly higher costs of lender's title insurance, owner's title insurance and simultaneous title insurance. The lender's title insurance in a state with promulgated rates, such as Texas, is on average $1,662.50 higher than the lender's title insurance in a state with no active regulation. The average simultaneous title insurance cost in a state with the regulation type of "promulgated rates," such as Texas, is $1,079.20 higher than the average simultaneous title insurance cost in a state without any active regulation. The average owner's title insurance cost in a state with the regulation type of "promulgated rates," such as Texas, is $1,021.20 higher than the average owner's title insurance cost in a state without any active regulation. An explanation is that state promulgation of minimum title rates set a floor in title insurance; regulation decreases

the level of competition and leads to high costs. Therefore, Texas's regulation policy explains the higher owner's title insurance, lender's title insurance and simultaneous title insurance in Texas versus other states. The comprehensive service coverage does not help explain the different prices of owner's title insurance, lender's title insurance and simultaneous title insurance among all states. It means that the average prices of owner's title insurance, lender's title insurance and simultaneous title insurance in a state that offers comprehensive service do not on average differ from states where the lender's title insurance and simultaneous title insurance includes risk premiums. Lender's title insurance and simultaneous title insurance are positively associated with loan amount or property value; the higher the loan amount or property value, the higher the expected value of title insurance. The regulation types, service coverage, loan amount and states' characteristics can explain 71 percent and 66 percent of the variance in lender's title insurance and simultaneous title insurance separately in 2016.

2.3 Stewart Data Analysis

2.3.1 Data

The database used for this section includes title insurance quotations from the Stewart Title Rate Calculator website (https://www.stewartratecalculator.com/) that provides a quotation of owner's policy and lender's policy based on answers to several questions. A first step is to identify the location of a property. This study chose a property within a certain zip code of the capital city of each state. A second step is to list a value of a property or loan amount as well as the transaction type, lender's policy and owner's policy. The Stewart Rate Calculator uses the state, city and county based on the zip code, simultaneous issue and the transaction type, basic loan policy and basic owner's policy. This section uses quotations for owner's title insurance, lender's title insurance, simultaneous owner's title insurance and simultaneous lender's title insurance based on five loan amount values: $200,000, $400,000, $600,000, $800,000 and $1,000,000.

Tables 2.3.1, 2.3.2, 2.3.3, 2.3.4 and 2.3.5 list the four quotations of owner's title insurance, lender's title insurance, simultaneous owner's title insurance and simultaneous lender's title insurance for different loan amounts; a $200,000 loan amount for each state (Table 2.3.1); a $400,000 loan amount for each state (Table 2.3.2); A $600,000 loan amount for each state (Table 2.3.3); an $800,000 loan amount for each state (Table 2.3.4); a $1,000,000 loan amount for each state (Table 2.3.5).

Table 2.3.1 Title Related Quotations on Stewart Website for a $200,000 property Value

State	Lender's title insurance	Owner's title insurance	Simultaneous lender's title insurance	Simultaneous owner's title insurance
Alabama	450	650	125	650
Alaska	706	882	75	882
Arizona	816	1020	100	1020
Arkansas	770	1100	50	1100
California	750	750	410	750
Colorado	N/A	N/A	150	1220
Connecticut	N/A	N/A	750	45
Delaware	585	850	25	850
District of Columbia	900	1140	100	1140
Florida	1075	1075	25	1075
Georgia	495	700	495	305
Hawaii	620	620	150	620
Idaho	952	952	75	952
Illinois	500	1550	1550	1550
Indiana	275	530	50	530
Iowa	N/A	N/A	N/A	N/A
Kansas	430	530	275	530
Kentucky	575	725	100	725
Louisiana	770	995	100	995
Maine	350	600	350	350
Maryland	574	822	65	822
Massachusetts	500	730	500	405
Michigan	674	1084	674	1084
Minnesota	575	663	100	627
Mississippi	600	800	75	800
Missouri	530	530	275	530
Montana	N/A	N/A	40	812
Nebraska	555	630	75	630
Nevada	760	950	475	950
New Hampshire	400	600	400	250
New Jersey	950	950	25	950
New Mexico	1193	1325	30	1325
New York	1018	1028	305	1028
North Carolina	365	365	25	365
North Dakota	400	525	50	525
Ohio	763	1088	100	1088
Oklahoma	745	745	50	745
Oregon	N/A	N/A	100	700

Pennsylvania	1400	1400	N/A	1400
Rhode Island	500	700	500	250
South Carolina	540	540	100	540
South Dakota	400	525	25	525
Tennessee	1244	1244	50	1244
Texas	1429	1429	100	1429
Utah	598	1076	598	1076
Vermont	550	748	550	223
Virginia	200	200	150	200
Washington	610	610	100	610
West Virginia	530	730	100	730
Wisconsin	830	830	250	830
Wyoming	N/A	N/A	100	815

Table 2.3.2 Title Related Quotations on Stewart Website for a $400,000 Property Value

State	Lender's title insurance	Owner's title insurance	Simultaneous lender's title insurance	Simultaneous owner's title insurance
Alabama	850	1250	125	1250
Alaska	1186	1482	75	1482
Arizona	1246	1558	100	1558
Arkansas	1540	2200	50	2200
California	1186	1186	585	1186
Colorado	N/A	N/A	150	1590
Connecticut	N/A	N/A	1255	95
Delaware	1105	1630	25	1630
District of Columbia	1710	2190	100	2190
Florida	2075	2075	25	2075
Georgia	945	1350	945	505
Hawaii	1171	1171	150	1171
Idaho	1502	1502	75	1502
Illinois	615	740	275	740
Indiana	505	930	50	930
Iowa	N/A	N/A	N/A	N/A
Kansas	615	740	275	740
Kentucky	1075	1325	100	1325
Louisiana	1430	1895	100	1895
Maine	700	1200	700	550
Maryland	1097	1563	65	1563
Massachusetts	1000	1460	1000	635
Michigan	1024	1661	1024	1661
Minnesota	1050	1138	100	1138
Mississippi	1200	1600	75	1600
Missouri	740	740	275	740
Montana	N/A	N/A	40	1287
Nebraska	955	1030	75	1030
Nevada	1240	1550	775	1550
New Hampshire	800	1000	800	250
New Jersey	1800	1800	25	1800
New Mexico	2082	2082	30	2313
New York	1769	1769	524	1769
North Carolina	685	685	25	685
North Dakota	750	925	50	925
Ohio	1300	1838	100	1838
Oklahoma	1120	1120	50	1120
Oregon	N/A	N/A	100	1150

Pennsylvania	2400	2400	N/A	2400
Rhode Island	1000	1400	1000	450
South Carolina	960	960	100	960
South Dakota	750	925	25	925
Tennessee	2144	2144	50	2144
Texas	2537	2537	100	2637
Utah	998	1796	998	1796
Vermont	1050	1397	1050	372
Virginia	1130	1530	150	1530
Washington	995	995	100	995
West Virginia	1010	1410	100	1410
Wisconsin	1230	1230	250	1230
Wyoming	N/A	N/A	100	1315

Table 2.3.3 Title Related Quotations on Stewart Website for a $600,000 Property Value

State	Lender's title insurance	Owner's title insurance	Simultaneous lender's title insurance	Simultaneous owner's title insurance
Alabama	1200	1750	125	1750
Alaska	1626	3032	75	2032
Arizona	1613	2016	100	2016
Arkansas	2310	3300	50	3300
California	1502	1502	711	1502
Colorado	N/A	N/A	150	1950
Connecticut	N/A	N/A	1755	145
Delaware	1625	2410	25	2410
District of Columbia	2430	3150	100	3150
Florida	3075	3075	25	3075
Georgia	1370	1945	1370	675
Hawaii	1703	1703	150	1703
Idaho	1972	1972	198	1972
Illinois	2410	2401	500	2401
Indiana	735	1330	50	1330
Iowa	N/A	N/A	N/A	N/A
Kansas	770	900	275	900
Kentucky	1525	1875	100	1875
Louisiana	2030	2705	100	2705
Maine	1050	1800	1050	800
Maryland	1563	2222	65	2222
Massachusetts	1500	2190	1500	865
Michigan	1344	2185	1344	2185
Minnesota	1475	1537	100	1538
Mississippi	1800	2400	75	2400
Missouri	870	870	275	870
Montana	N/A	N/A	40	1657
Nebraska	1355	1430	75	1430
Nevada	1720	2150	1075	1075
New Hampshire	1175	1400	1175	275
New Jersey	2500	2500	25	2500
New Mexico	2875	3194	30	3194
New York	2441	2478	732	2478
North Carolina	950	950	25	950
North Dakota	1075	1300	50	1300
Ohio	1775	2463	100	2463
Oklahoma	1550	1550	50	1550

Oregon	N/A	N/A	100	1500
Pennsylvania	3300	3300	N/A	3300
Rhode Island	1500	2100	1500	650
South Carolina	1350	1350	100	1350
South Dakota	1075	1300	25	1300
Tennessee	2894	2894	50	2844
Texas	3645	3645	100	3645
Utah	1298	2336	1298	2336
Vermont	1550	2048	1550	523
Virginia	1640	2240	150	2240
Washington	1335	1335	100	1335
West Virginia	1450	2050	100	2050
Wisconsin	1530	1530	250	1530
Wyoming	N/A	N/A	100	1765

Table 2.3.4 Title Related Quotations on Stewart Website for a $800,000 Property Value

State	Lender's title insurance	Owner's title insurance	Simultaneous lender's title insurance	Simultaneous owner's title insurance
Alabama	1500	2150	125	2115
Alaska	2006	2507	75	2507
Arizona	1980	2475	100	2475
Arkansas	3080	4400	50	4400
California	1814	1814	836	1814
Colorado	N/A	N/A	150	2300
Connecticut	N/A	N/A	2205	195
Delaware	2145	3190	25	3190
District of Columbia	3090	4050	100	4050
Florida	4075	4075	25	4075
Georgia	1770	2485	1770	815
Hawaii	2246	2246	150	2246
Idaho	2442	2442	245	2442
Illinois	2810	2810	500	2810
Indiana	965	1730	50	1730
Iowa	N/A	N/A	N/A	N/A
Kansas	970	1100	275	1100
Kentucky	1925	2375	100	2375
Louisiana	2570	3425	100	3425
Maine	1375	2313	1375	938
Maryland	1989	2826	65	2826
Massachusetts	2000	2920	2000	1095
Michigan	1664	2709	1664	2709
Minnesota	1875	1938	100	1938
Mississippi	2400	3200	75	3200
Missouri	1010	1010	275	1010
Montana	N/A	N/A	40	2057
Nebraska	1755	1830	75	1830
Nevada	2200	2750	1375	2750
New Hampshire	1525	1800	1525	325
New Jersey	3050	3050	25	3050
New Mexico	3571	3968	30	3968
New York	3103	3155	931	3155
North Carolina	1160	1160	25	1160
North Dakota	1375	1650	50	1650
Ohio	2225	3013	100	3013
Oklahoma	1950	1950	50	1950
Oregon	N/A	N/A	100	1800
Pennsylvania	4100	4100	N/A	4100

Rhode Island	2000	2800	2000	850
South Carolina	1710	1710	100	1710
South Dakota	1375	1650	25	1650
Tennessee	3494	3494	50	3494
Texas	4753	4753	100	4753
Utah	1498	2696	1498	2696
Vermont	2050	2698	2050	673
Virginia	2120	2920	150	2920
Washington	1665	1665	100	1655
West Virginia	1850	2650	200	2650
Wisconsin	1730	1730	250	1730
Wyoming	N/A	N/A	100	2165

Table 2.3.5 Title Related Quotations on Stewart Website for a $1,000,000 Property Value

State	Lender's title insurance	Owner's title insurance	Simultaneous lender's title insurance	Simultaneous owner's title insurance
Alabama	1800	2550	125	2550
Alaska	2326	2907	75	2907
Arizona	2397	2397	100	2933
Arkansas	3850	5500	50	5500
California	2126	2126	961	2126
Colorado	N/A	N/A	150	2650
Connecticut	N/A	N/A	2900	245
Delaware	2655	3970	25	3970
District of Columbia	3750	4950	100	4950
Florida	5075	5075	25	5075
Georgia	2170	3025	2170	955
Hawaii	2789	2789	150	2789
Idaho	2912	2912	292	2912
Illinois	3210	3210	500	3210
Indiana	1195	2130	50	2130
Iowa	N/A	N/A	N/A	N/A
Kansas	1170	1300	275	1300
Kentucky	2325	2875	100	2875
Louisiana	3110	4145	100	4145
Maine	1625	2563	1625	988
Maryland	2415	3430	65	3430
Massachusetts	2500	3650	2500	1325
Michigan	1984	3233	1984	3233
Minnesota	2275	2338	100	2338
Mississippi	3000	4000	75	4000
Missouri	1150	1150	275	1150
Montana	N/A	N/A	40	2475
Nebraska	2155	2230	75	2230
Nevada	2680	3350	1675	3350
New Hampshire	1875	2200	1875	375
New Jersey	3600	3600	25	3600
New Mexico	4268	4742	30	4742
New York	3765	4508	1130	4508
North Carolina	1370	1370	25	1370
North Dakota	1675	2000	50	2000
Ohio	2675	3563	100	3563
Oklahoma	2350	2350	50	2350
Oregon	N/A	N/A	100	2100
Pennsylvania	4900	4900	N/A	4900

Rhode Island	2500	3500	2500	1050
South Carolina	2070	2070	100	2070
South Dakota	1675	2000	25	2000
Tennessee	4094	4094	50	4094
Texas	5861	5861	100	5861
Utah	1698	3056	1698	3056
Vermont	2550	3348	2550	823
Virginia	2600	3600	150	3600
Washington	1965	1965	100	1965
West Virginia	2250	3250	100	3250
Wisconsin	1930	1930	250	1930
Wyoming	N/A	N/A	100	2565

2.3.2 Descriptive Analysis

The database used for this section includes title insurance quotations from Stewart Tite Rate Calculator website (https://www.stewartratecalculator.com/) that provides a quotation of owner's policy and lender's policy based on answers to several questions. When the loan amount is $200,000, for a lender's title insurance alone, Texas has the highest title cost ($1,429) across all the states. For an owner's title insurance alone, Texas' title rate is the second highest ($1,429) quotation across all the states, but there is no significant difference between Texas' rate with the highest quotation in the U.S. (Illinois: $1,550). For the total title insurance when a consumer purchases both lender's title insurance and owner's title insurance (hereafter referred to as simultaneous title insurance), Texas has the fourth highest simultaneous title insurance quotation ($1,529) across all states. The three states with the highest quotations of simultaneous title insurance are Illinois, Michigan and Utah. Figure 7 illustrates the simultaneous title insurance by state when loan amount is $200,000.

When the loan amount is $400,000, Texas has the highest quotation of a lender's title insurance alone and an owner's title insurance alone. As to the simultaneous title insurance quotation, Utah has the highest quotation ($2,794) and Texas has the second highest quotation ($2,737), but there is no significant difference between these two highest quotations. Figure 8 illustrates the lender's title insurance, owner's title insurance and simultaneous title insurance by state when loan amount is $400,000. When the loan amount rises to $600,000, $800,000 and $1,000,000. Texas has the

highest quotation for (a) lender's title insurance alone, (b) owner's title insurance alone, as well as (c) simultaneous title insurance. The regression indicates that Texas' rate of increasing of title insurance with the increasing loan amount is higher than that of other states. Figure 9 to Figure 11 illustrate the lender's title insurance, owner's title insurance and simultaneous title insurance by state when loan amount is $600,000, $800,000 and $1,000,000.

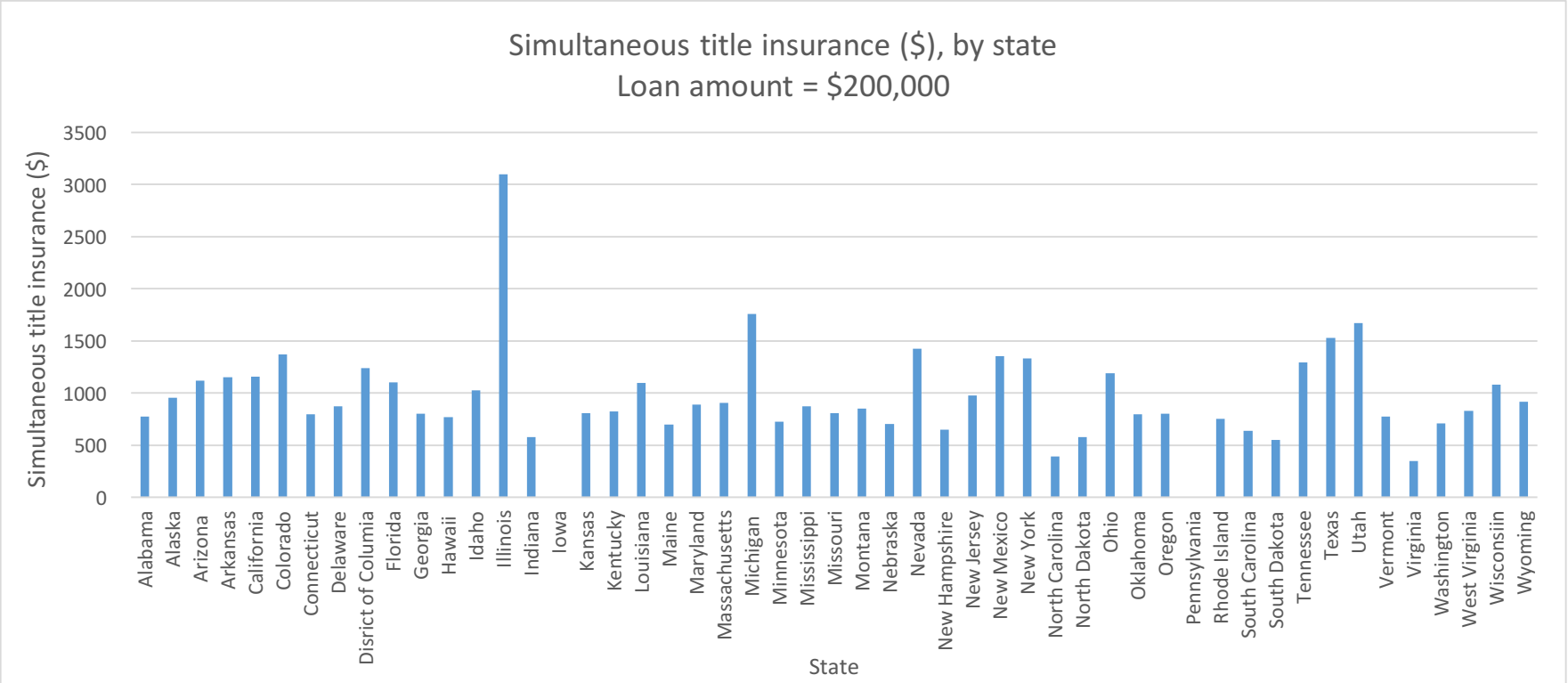


Figure 2.3.1 Simultaneous title insurance ($) for a $200,000 loan amount, by state

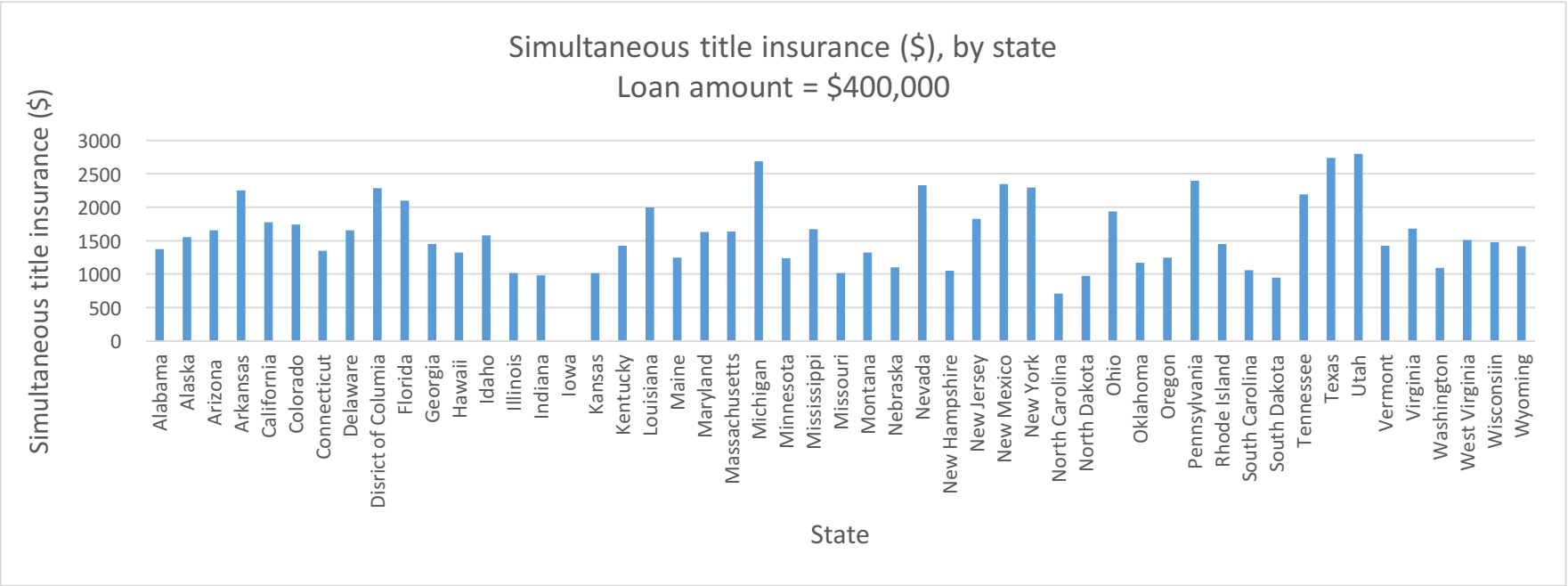


Figure 2.3.2 Simultaneous title insurance ($) for a $400,000 loan amount, by state

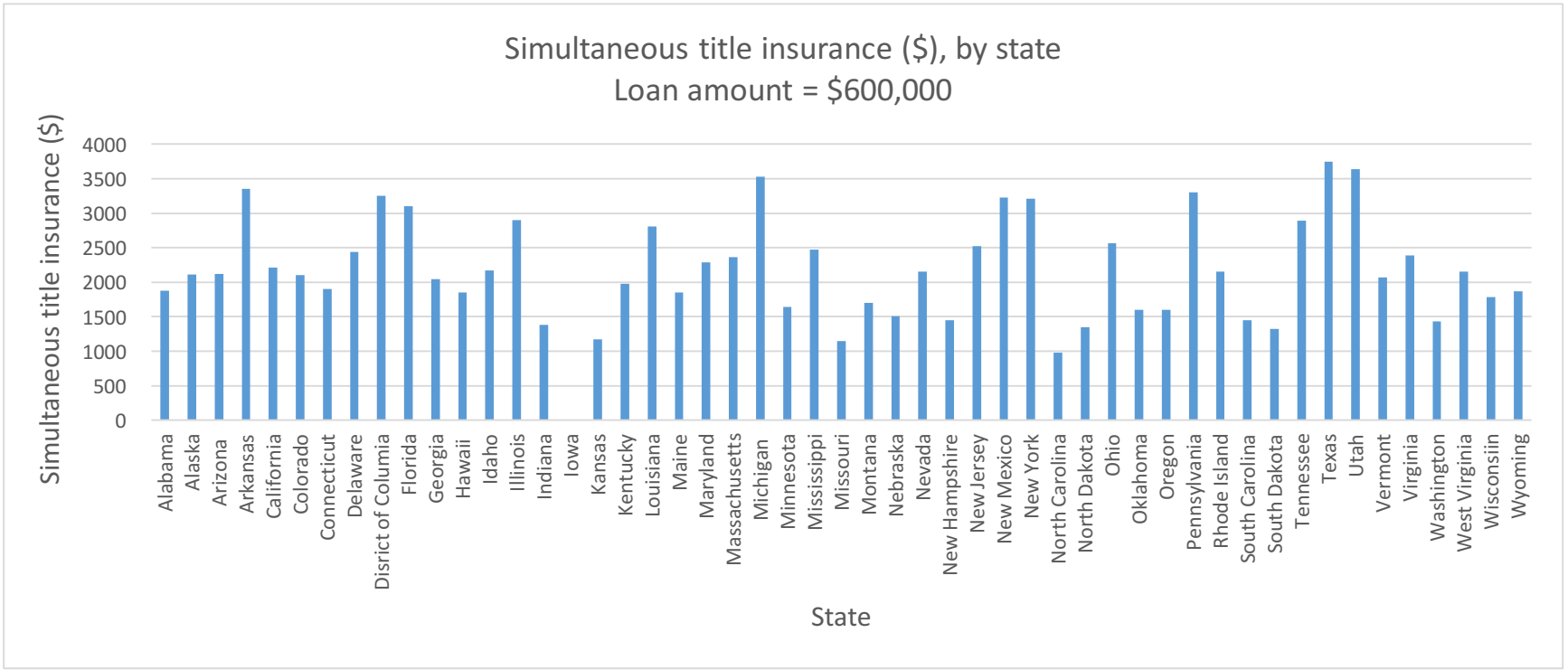


Figure 2.3.3 Simultaneous title insurance ($) for a $600,000 loan amount, by state

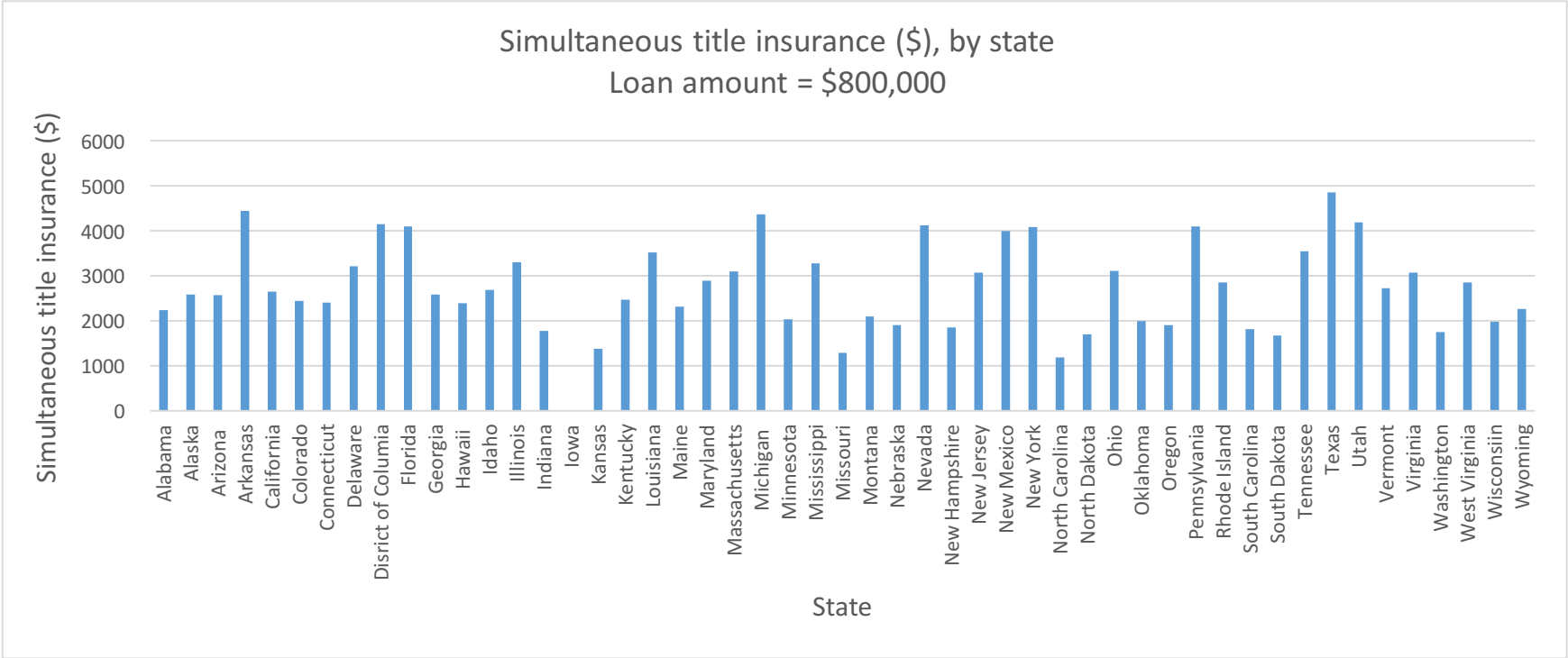


Figure 2.3.4 Simultaneous title insurance ($) for a $800,000 loan amount, by state

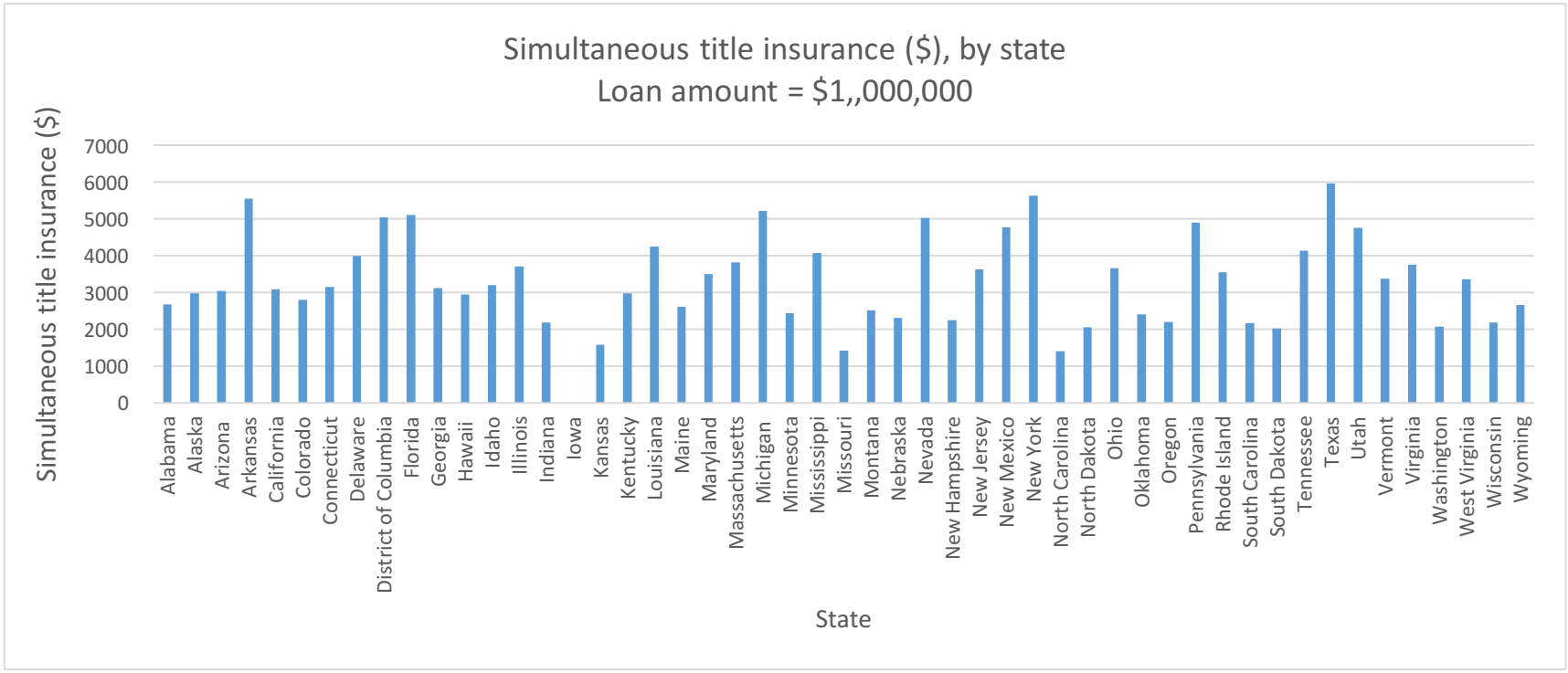


Figure 2.3.5 Simultaneous title insurance ($) for a $1,000,000 loan amount, by state

2.3.3 Regression Analysis

The quotations on the Stewart website include lender's title insurance, owner's title insurance, simultaneous lender's title insurance and owner's title insurance. Lender's title insurance or an equivalent state certification of title is required by most if not all mortgage issuing institutions in all U.S. states. The owner's title insurance is optional for customers. The regression analysis examined the variation in lender's title insurance rate among the states. Table 2.3.6 and table 2.3.7 show the regression results of the analysis of lender's title insurance among all the states. As consumers can take the discounts of simultaneous lender's title insurance or owner's title insurance when they purchase both the lender's and owner's title insurance, the cost of a lender's simultaneous policy alone or owner's simultaneous policy alone is not a useful dependent variable. So simultaneous title insurance that is the sum of simultaneous lender's title insurance and simultaneous owner's title insurance represents a useful dependent variable. Table 2.3.8 and Table 2.3.9 show the regression results of the analysis of simultaneous title insurance.

The results in model 1 of Table 2.3.6 illustrate that the lender's title insurance in Texas is significantly higher than the lender's title insurance in all other states. The negative coefficient of each state in Table 2.3.6 means that the lender's title insurance in this state is less than the lender's title insurance in Texas on average. For example, the coefficient of Alabama is -2485, which means the expected value of lender's title

insurance in Alabama is $2,485 lower than the lender's title insurance in Texas on average. The insurance quotations on the Stewart website are for loan amounts of $200,000, $400,000, $600,000, $800,000 and $1,000,000. After controlling for the loan amount, the results in model 2 show that for the same value of loan amount, the lender's title insurance in Texas remains significantly higher than the lender's title insurance in all other states.

Table 2.3.7 shows the regression result that seek to explain the fraction of variance of lender's title insurance. Model 1 to Model 4 add the independent variables one by one. Model 1includes four different levels of loan amounts as the independent variable and a $200,000 loan amount is the baseline. Model 2 adds three service coverage levels including: risk premium and examination, risk premium, searching and examination, and comprehensive, so risk premium alone is the baseline. Model 3 adds four regulation types: use and file; file and use; prior approval and promulgated rates with "no active regulation" as the baseline of comparison. Model 4 adds the characteristics of the state, including median income and median house price. The regression results show that the expected difference in lender's title insurance for $400,000 loan amount is $530 higher than that of $200,000 loan amount. The expected difference for lender's title insurance for $600,000 loan amount is $1,045 higher than that of $200,000 loan amount and the lender's title insurance for $800,000 loan amount is $1,500 higher than that of $200,000 loan amount. The expected difference for lender's title insurance for $1,000,000 loan amount is $1,953 higher than that of $200,000 loan amount.

The results of model 2 in Table 2.3.7 show that the coefficient of a comprehensive set of title services is not statistically significant, which means that the expected cost of lender's title insurance that includes comprehensive service coverage is the same as the lender's title insurance that only includes risk premiums. As to the policy type, the lender's title insurance under the policy type of promulgated rates is significantly higher than lender's title insurance under no active regulation on average, holding all else constant. The coefficient of "promulgated" means that the expected value of lender's title insurance in a state with the regulation type of "promulgated rates" is $1,608 higher than the expected cost of lender's title insurance in a state without any active regulation. The lender's title insurance under the policy types of use and file, prior approval and file and use have no significant differences with the lender's title insurance in the states without any active regulation. The title insurance regulation type in Texas is promulgated rate. Texas's promulgated rate policy explains part of the higher lender's title insurance versus the lender's title insurance of other states. Model 4 results indicate that neither median income nor median house price can explain the variation of the lender's title insurance among all the states. All these factors, including loan amount, promulgated rates and premiums & examination can explain 71 percent of the variation of lender's title insurance. Other characteristics might be able to explain the remaining variation of total title charge, but other data are not available.

Table 2.3.8 and table 2.3.9 show the regression analysis of simultaneous title insurance

where the lender's title insurance is sold with the buyer's title insurance. The results are comparable to the regression results of lender's title insurance rates. The cost of simultaneous title insurance (owners and lenders) in Texas is significantly higher than the simultaneous title insurance in all the other states. The negative coefficients of each state in Table 2.3.8 means that the simultaneous title insurance in this state is less than the simultaneous title insurance in Texas on average. For example, the coefficient of Alabama is -1977, which means that the expected cost of simultaneous title insurance in Alabama is $1,977 lower on average than the equivalent simultaneous title insurance in Texas. The higher loan amount is associated with a higher title insurance charges. With a loan amount increases by $200,000, the simultaneous title insurance increases by about $600. The coefficient of comprehensive is not statistically significant, which means that simultaneous title insurance that includes comprehensive service coverage is the same as the simultaneous title insurance that only includes risk premiums. As to the policy type, simultaneous title insurances in the states with promulgated rate are significantly higher than that of the states without active regulation. The coefficient of "promulgated" means that the expected value of simultaneous title insurances in a state with the regulation type of "promulgated rates" is $1,079.20 higher than the expected value of simultaneous title insurances in a state without any active regulation. All these significant factors, including loan amount, promulgated rates and premiums & examination can explain 66 percent of the variation of simultaneous title insurances. Other characteristics could perhaps explain the remaining variation of total title charge, but other data are not available.

Table 2.3.6 Comparison of Lender's Title Insurance Between Texas and Other State

	(1) Lender's title insurance	(2) Lender's title insurance
Alabama	-2485.0***	-2485.0***
	(1.13e-11)	(1.23e-11)
Alaska	-2075.0***	-2075.0***
	(1.13e-11)	(1.23e-11)
Arizona	-2034.6***	-2034.6***
	(1.13e-11)	(1.23e-11)
Arkansas	-1335.0***	-1335.0***
	(1.13e-11)	(1.23e-11)
California	-2169.4***	-2169.4***
	(1.13e-11)	(1.23e-11)
Delaware	-2022.0***	-2022.0***
	(1.13e-11)	(1.23e-11)
District of Columbia	-1269.0***	-1269.0***
	(1.13e-11)	(1.23e-11)
Florida	-570.0***	-570.0***
	(1.13e-11)	(1.23e-11)
Georgia	-2295.0***	-2295.0***
	(1.13e-11)	(1.23e-11)
Hawaii	-1939.3***	-1939.3***
	(1.13e-11)	(1.23e-11)
Idaho	-1689.0***	-1689.0***
	(1.13e-11)	(1.23e-11)
Illinois	-1736.0***	-1736.0***
	(1.13e-11)	(1.23e-11)
Indiana	-2910.0***	-2910.0***
	(1.13e-11)	(1.23e-11)
Kansas	-2854.0***	-2854.0***
	(1.13e-11)	(1.23e-11)
Kentucky	-2160.0***	-2160.0***
	(1.13e-11)	(1.23e-11)
Louisiana	-1663.1***	-1663.1***
	(1.13e-11)	(1.23e-11)
Maine	-2625.0***	-2625.0***
	(1.13e-11)	(1.23e-11)
Maryland	-2117.4***	-2117.4***
	(1.13e-11)	(1.23e-11)
Massachusetts	-2145.0***	-2145.0***
	(1.13e-11)	(1.23e-11)
Michigan	-2306.9***	-2306.9***
	(1.13e-11)	(1.23e-11)

Minnesota	-2195.0***	-2195.0***
	(1.13e-11)	(1.23e-11)
Mississippi	-1845.0***	-1845.0***
	(1.13e-11)	(1.23e-11)
Missouri	-2785.0***	-2785.0***
	(1.13e-11)	(1.23e-11)
Nebraska	-2290.0***	-2290.0***
	(1.13e-11)	(1.23e-11)
Nevada	-1925.0***	-1925.0***
	(1.13e-11)	(1.23e-11)
New Hampshire	-2490.0***	-2490.0***
	(1.13e-11)	(1.23e-11)
New Jersey	-1265.0***	-1265.0***
	(1.13e-11)	(1.23e-11)
New Mexico	-847.2***	-847.2***
	(1.13e-11)	(1.23e-11)
New York	-1225.8***	-1225.8***
	(1.13e-11)	(1.23e-11)
North Carolina	-2739.0***	-2739.0***
	(1.13e-11)	(1.23e-11)
North Dakota	-2590.0***	-2590.0***
	(1.13e-11)	(1.23e-11)
Ohio	-1897.4***	-1897.4***
	(1.13e-11)	(1.23e-11)
Oklahoma	-2102.0***	-2102.0***
	(1.13e-11)	(1.23e-11)
Pennsylvania	-425.0***	-425.0***
	(1.13e-11)	(1.23e-11)
Rhode Island	-2145.0***	-2145.0***
	(1.13e-11)	(1.23e-11)
South Carolina	-2319.0***	-2319.0***
	(1.13e-11)	(1.23e-11)
Tennessee	-2590.0***	-2590.0***
	(1.13e-11)	(1.23e-11)
Texas	-871.0***	-871.0***
	(1.13e-11)	(1.23e-11)
Utah	0	0
	(.)	(.)
Vermont	-2427.0***	-2427.0***
	(1.13e-11)	(1.23e-11)
Virginia	-2095.0***	-2095.0***
	(1.13e-11)	(1.23e-11)
Washington	-2107.0***	-2107.0***
	(1.13e-11)	(1.24e-11)

West Virginia	-2331.0***	-2331.0***
	(1.13e-11)	(1.23e-11)
Wisconsin	-2227.0***	-2227.0***
	(1.13e-11)	(1.23e-11)
Tennessee	-2195.0***	-2195.0***
	(1.13e-11)	(1.23e-11)
Loan amount is $400,000		529.3***
		(38.87)
Loan amount is $600,000		1045.1***
		(74.57)
Loan amount is $800,000		1500.2***
		(105.8)
Loan amount is $1,000,000		1952.5***
		(138.5)
Constant	3645.0***	2639.6***
	(1.13e-11)	(70.35)
N	225	225
R^2	0.425	0.910

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2.3.7 Regression Results of The Variation of Lender's Insurance

	(1) Lender's title insurance	(2) Lender's title insurance	(3) Lender's title insurance	(4) Lender's title insurance
Loan amount is $400,000	529.3***	529.3***	529.3***	529.3***
	(34.76)	(35.00)	(35.33)	(35.50)
Loan amount is $600,000	1045.1***	1045.1***	1045.1***	1045.1***
	(66.69)	(67.15)	(67.78)	(68.10)
Loan amount is $800,000	1500.2***	1500.2***	1500.2***	1500.2***
	(94.64)	(95.29)	(96.18)	(96.64)
Loan amount is $1,000,000	1952.5***	1952.5***	1952.5***	1952.5***
	(123.9)	(124.7)	(125.9)	(126.5)
Premiums & examination		759.6***	727.9***	814.5***
		(102.0)	(160.6)	(182.9)
Premiums, search & examination		326.6	-111.2	-50.57
		(513.6)	(146.9)	(161.9)
Comprehensive		246.3	28.90	24.82
		(214.4)	(187.2)	(189.8)
Use and file			-161.0	-27.32
			(246.7)	(262.3)
File and use			-194.9	-144.1
			(195.0)	(191.6)
Prior approval			276.9	356.3
			(289.4)	(275.7)
Promulgated			1608.3***	1662.5***
			(320.1)	(359.6)
Median income				-0.00765
				(0.00814)
Median house price				0.00172*
				(0.00103)
Constant	676.7***	545.0***	576.7***	625.6
	(42.13)	(88.37)	(154.5)	(425.0)
N	225	225	225	225
R^2	0.486	0.512	0.701	0.712

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2.3.8 Comparison of Simultaneous Title Insurance Between Texas and Other State

	(1) Simultaneous title insurance	(2) Simultaneous title insurance
Alabama	-1977.0***	-1977.0***
	(2.56e-11)	(2.60e-11)
Alaska	-1728.0***	-1728.0***
	(2.56e-11)	(2.60e-11)
Arizona	-1664.6***	-1664.6***
	(2.56e-11)	(2.60e-11)
Arkansas	-415.0***	-415.0***
	(2.56e-11)	(2.60e-11)
California	-1588.8***	-1588.8***
	(2.56e-11)	(2.60e-11)
Colorado	-1673.0***	-1673.0***
	(2.56e-11)	(2.60e-11)
Connecticut	-1847.0***	-1847.0***
	(2.57e-11)	(2.60e-11)
Delaware	-1330.0***	-1330.0***
	(2.56e-11)	(2.60e-11)
District of	-569.0***	-569.0***
Columbia	(2.56e-11)	(2.60e-11)
Florida	-665.0***	-665.0***
	(2.56e-11)	(2.60e-11)
Georgia	-1764.0***	-1764.0***
	(2.56e-11)	(2.60e-11)
Hawaii	-1909.2***	-1909.2***
	(2.56e-11)	(2.60e-11)
Idaho	-1632.0***	-1632.0***
	(2.56e-11)	(2.60e-11)
Illinois	-957.8***	-957.8***
	(2.56e-11)	(2.60e-11)
Indiana	-2385.0***	-2385.0***
	(2.56e-11)	(2.60e-11)
Kansas	-2576.0***	-2576.0***
	(2.56e-11)	(2.60e-11)
Kentucky	-1830.0***	-1830.0***
	(2.57e-11)	(2.60e-11)
Louisiana	-1032.0***	-1032.0***
	(2.56e-11)	(2.60e-11)
Maine	-2019.8***	-2019.8***
	(2.56e-11)	(2.60e-11)
Maryland	-1527.4***	-1527.4***
	(2.56e-11)	(2.60e-11)
Massachusetts	-1400.0***	-1400.0***

	(2.56e-11)	(2.60e-11)
Michigan	-252.6***	-252.6***
	(2.56e-11)	(2.60e-11)
Minnesota	-2149.2***	-2149.2***
	(2.56e-11)	(2.60e-11)
Mississippi	-1290.0***	-1290.0***
	(2.56e-11)	(2.60e-11)
Missouri	-2630.0***	-2630.0***
	(2.56e-11)	(2.60e-11)
Montana	-2067.4***	-2067.4***
	(2.56e-11)	(2.60e-11)
Nebraska	-2260.0***	-2260.0***
	(2.56e-11)	(2.60e-11)
Nevada	-755.0***	-755.0***
	(2.56e-11)	(2.60e-11)
New Hampshire	-2315.0***	-2315.0***
	(2.56e-11)	(2.60e-11)
New Jersey	-1360.0***	-1360.0***
	(2.56e-11)	(2.60e-11)
New Mexico	-626.6***	-626.6***
	(2.56e-11)	(2.60e-11)
New York	-453.0***	-453.0***
	(2.56e-11)	(2.60e-11)
North Carolina	-2834.0***	-2834.0***
	(2.56e-11)	(2.60e-11)
North Dakota	-2435.0***	-2435.0***
	(2.56e-11)	(2.60e-11)
Ohio	-1272.0***	-1272.0***
	(2.56e-11)	(2.60e-11)
Oklahoma	-2172.0***	-2172.0***
	(2.56e-11)	(2.60e-11)
Oregon	-2215.0***	-2215.0***
	(2.56e-11)	(2.60e-11)
Rhode Island	-1615.0***	-1615.0***
	(2.56e-11)	(2.60e-11)
South Carolina	-2339.0***	-2339.0***
	(2.56e-11)	(2.60e-11)
South Dakota	-2460.0***	-2460.0***
	(2.56e-11)	(2.60e-11)
Tennessee	-951.0***	-951.0***
	(2.56e-11)	(2.60e-11)
Texas	0	0
	(.)	(.)
Utah	-355.0***	-355.0***

	(2.56e-11)	(2.60e-11)
Vermont	-1692.2***	-1692.2***
	(2.56e-11)	(2.60e-11)
Virginia	-1517.0***	-1517.0***
	(2.56e-11)	(2.60e-11)
Washington	-2353.0***	-2353.0***
	(2.56e-11)	(2.60e-11)
West Virginia	-1627.0***	-1627.0***
	(2.56e-11)	(2.60e-11)
Wisconsin	-2065.0***	-2065.0***
	(2.56e-11)	(2.60e-11)
Wyoming	-1940.0***	-1940.0***
	(2.56e-11)	(2.60e-11)
Loan amount is		600.2***
$400,000		(76.18)
Loan amount is		1192.7***
$600,000		(84.62)
Loan amount is		1764.9***
$800,000		(119.7)
Loan amount is		2325.4***
$1,000,000		(159.4)
Constant	3765.0***	2588.4***
	(2.56e-11)	(83.95)
N	245	245
R^2	0.373	0.898

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2.3.9 Regression Results of The Variation of Simultaneous Title Insurance

	(1) Simultaneous title insurance	(2) Simultaneous title insurance	(3) Simultaneous title insurance	(4) Simultaneous title insurance
Loan amount is $400,000	600.2***	600.2***	600.2***	600.2***
	(68.14)	(68.57)	(69.16)	(69.45)
Loan amount is $600,000	1192.7***	1192.7***	1192.7***	1192.7***
	(75.68)	(76.16)	(76.81)	(77.15)
Loan amount is $800,000	1764.9***	1764.9***	1764.9***	1764.9***
	(107.1)	(107.8)	(108.7)	(109.2)
Loan amount is $1,000,000	2325.4***	2325.4***	2325.4***	2325.4***
	(142.6)	(143.5)	(144.7)	(145.3)
Premiums & examination		1264.4***	1169.2***	1248.3***
		(119.7)	(207.8)	(233.3)
Premiums, search & examination		876.2**	630.7	670.9
		(365.5)	(455.6)	(481.1)
Comprehensive		-51.15	-119.2	-124.8
		(200.0)	(200.5)	(201.9)
Use and file			-361.6	-231.5
			(288.8)	(303.7)
File and use			-150.0	-100.2
			(251.4)	(248.1)
Prior approval			-121.4	-59.95
			(313.5)	(308.3)
Promulgated			1022.9**	1079.2**
			(455.9)	(500.1)
Median house price				0.00166
				(0.00154)
Median income				-0.00766
				(0.0106)
Constant	986.5***	909.0***	1004.1***	792.8
	(62.63)	(112.5)	(214.9)	(549.4)
Observations	245	245	245	245
R^2	0.525	0.595	0.652	0.659

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

2.3.4 Regression Analysis of Time Series Data

The section uses two sets of quotations of owner's title insurance on Stewart's website, one set taken in 2010 and a second in 2016. Table 2.3.10 and Table 2.3.11 list the difference of owner's title insurance between 2010 and 2016 for two loan amounts: Table 2.3.10 is for a $400,000 loan amount and Table 2.3.11 is for a $600,000 loan amount. Consider a $400,000 loan amount as an example, the owner's title insurance for a $400,000 loan amount decreases in twelve states from 2010 to 2016, including Delaware, Hawaii, Illinois, Indiana, Kansas, Minnesota, New York, Nevada, South Dakota, Utah, Washington and Wisconsin. The owner's title insurance of fifteen states does not change from 2010 to 2016, including Alabama, Alaska, Arkansas, California, Florida, Kentucky, Louisiana, Maine, Massachusetts, New Jersey, North Dakota, Ohio, South Carolina, Virginia and West Virginia. The owner's title insurance of eighteen states increases from 2010 to 2016, including Texas. Texas' owner's title insurance for a $400,000 loan amount increases by $92 from $2,445 in 2010 to $2,537 in 2016.

The regression analysis examined the fraction of variance of owner's title insurance in 2010 and 2016. Table 2.3.12 and Table 2.3.13 show the regression results of the analysis of owner's title insurance among all the states. The results in model 1 of Table 2.3.12 illustrate that the owner's title insurance in Texas is significantly higher than the owner's title insurance in all other states. The negative coefficient of each state in Table 2.3.12 means that the owner's title insurance in this state is less than the owner's title insurance in Texas on average. For example, the coefficient of Alabama is -1535, which

means the owner's title insurance in Alabama is $1,535 lower than the owner's title insurance in Texas on average. The time-series insurance quotations on Stewart's website are for loan amounts of $400,000, and $600,000. After controlling for the loan amount, the results in model 2 show that for the same value of loan amount, the owner's title insurance in Texas remains significantly higher than the owner's title insurance in all the other states. The expected value of owner's title insurance for a $400,000 loan amount is $590 higher than that of owner's title insurance for a $600,000 loan amount.

Table 2.3.13 shows the regression result that seek to explain the fraction of variance of owner's title insurance. Model 1 to Model 4 add the independent variables one by one. Model 1 includes a dummy variable indicating $600,000 loan amounts as the independent variable and a $400,000 loan amount is the baseline. Model 2 adds four regulation types: use and file; file and use; prior approval and promulgated rates with "no active regulation" as the baseline of comparison. Model 3 adds three service coverage levels including: risk premium and examination, risk premium, searching and examination, and comprehensive, so risk premium alone is the baseline.

The results in Model 1 illustrate that expected value of owner's title insurance for a $600,000 loan amount is $590.30 higher than that of $400,000 a loan amount. As to the policy type, the owner's title insurance under the policy type of promulgated rates is significantly higher than owner's title insurance under no active regulation on average, holding all else constant. The coefficient of "promulgated" means that the expected

value of owner's title insurance in a state with the regulation type of "promulgated rates" is $1,079 higher than the expected value of owner's title insurance in a state without any active regulation. The owner's title insurance under the policy types of use and file, prior approval and file and use have no significantly difference with the owner's title insurance in the states without any active regulation. The title insurance regulation type in Texas is promulgated rate. Texas's promulgated rate policy explains the higher owner's title insurance versus the owner's title insurance of other states. The results of model 3 show that none of the service coverage is statistically significant, which means that owner's title insurance that includes more services is the same as the owner's title insurance that only includes risk premiums. All these significant factors, including loan amount and promulgated rates can explain 38 percent of the variation of owner's title insurance. Other characteristics might be able to explain the remaining variance of owner's title insurance, but other data are not available.

Table 2.3.10 The difference of owner's title insurance for a $400,000 loan amount from 2010 to 2016

State	Owner's title insurance in 2010	Owner's title insurance in 2016	Difference
Alabama	1250	1250	0
Alaska	1482	1482	0
Arizona	1418	1558	140
Arkansas	2200	2200	0
California	1186	1186	0
Colorado	1556	.	.
Connecticut	1350	.	.
Delaware	2190	1630	-560
District of Columbia	1250	2190	940
Florida	2075	2075	0
Georgia	1200	1350	150
Hawaii	1562	1171	-391
Idaho	1430	1502	72
Illinois	1545	740	-805
Indiana	950	930	-20
Iowa	110	.	.
Kansas	1251	740	-511
Kentucky	1325	1325	0
Louisiana	1895	1895	0
Maine	1200	1200	0
Maryland	1425	1563	138
Massachusetts	1460	1460	0
Michigan	1575	1661	86
Minnesota	1163	1138	-25
Mississippi	1400	1600	200
Missouri	360	740	380
Montana	1247	.	.
Nebraska	955	1030	75
New Hampshire	1341	1550	209
New Jersey	1000	1000	0
New Mexico	1685	1800	115
New York	2256	2082	-174
Nevada	2082	1769	-313
North Carolina	650	685	35
North Dakota	925	925	0
Ohio	1838	1838	0

Oklahoma	1085	1120	35
Oregon	1150	.	.
Pennsylvania	2359	2400	41
Rhode Island	1250	1400	150
South Carolina	960	960	0
South Dakota	1379	925	-454
Tennessee	2069	2144	75
Texas	2445	2537	92
Utah	1995	1796	-199
Vermont	1310	1397	87
Virginia	1530	1530	0
Washington	1090	995	-95
West Virginia	1410	1410	0
Wisconsin	1775	1230	-545
Wyoming	1315	.	.

Table 2.3.11 The difference of owner's title insurance for a $600,000 loan amount from 2010 to 2016

State	Owner's title insurance in 2010	Owner's title insurance in 2016	Difference
Alabama	1750	1750	0
Alaska	3032	2032	1000
Arizona	2016	1838	178
Arkansas	3300	3300	0
California	1502	1502	0
Colorado	.	1915	.
Connecticut	.	1900	.
Delaware	2410	3150	-740
District of Columbia	3150	1850	1300
Florida	3075	3075	0
Georgia	1945	1745	200
Hawaii	1703	2270	-568
Idaho	1972	1880	92
Illinois	2401	1945	456
Indiana	1330	1350	-20
Iowa	.	210	.
Kansas	900	1564	-664
Kentucky	1875	1875	0
Louisiana	2705	2705	0
Maine	1800	1800	0
Maryland	2222	2025	197
Massachusetts	2190	2190	0
Michigan	2185	2075	110
Minnesota	1537	1613	-76
Mississippi	2400	2000	400
Missouri	870	440	430
Montana	.	1657	.
Nebraska	1430	1355	75
New Hampshire	2150	1707	444
New Jersey	1400	1400	0
New Mexico	2500	2345	155
New York	3194	3116	78
Nevada	2478	2916	-438
North Carolina	950	900	50
North Dakota	1300	1300	0
Ohio	2463	2463	0
Oklahoma	1550	1495	55

Oregon	.	1500	.
Pennsylvania	3300	3234	66
Rhode Island	2100	1800	300
South Carolina	1350	1350	0
South Dakota	1300	1810	-510
Tennessee	2894	2819	75
Texas	3645	3513	132
Utah	2336	2595	-259
Vermont	2048	1910	138
Virginia	2240	2240	0
Washington	1335	1462	-127
West Virginia	2050	2050	0
Wisconsin	1530	2175	-645
Wyoming	.	1765	.

Table 2.3.12 Compare Owner's Title Insurance Between Texas and Other States

	(1) Owner's title insurance	(2) Owner's title policy
Alabama	-1535.0***	-1535.0***
	(8.55e-12)	(8.06e-12)
Alaska	-1028.0***	-1028.0***
	(8.55e-12)	(8.06e-12)
Arizona	-1327.5***	-1327.5***
	(8.55e-12)	(8.06e-12)
Arkansas	-285.0***	-285.0***
	(8.57e-12)	(8.05e-12)
California	-1691.0***	-1691.0***
	(8.57e-12)	(8.05e-12)
Colorado	-1299.5***	-1299.5***
	(8.55e-12)	(8.06e-12)
Connecticut	-1410.0***	-1410.0***
	(8.55e-12)	(8.06e-12)
Delaware	-690.0***	-690.0***
	(8.57e-12)	(8.05e-12)
District of Columbia	-925.0***	-925.0***
	(8.55e-12)	(8.06e-12)
Florida	-460.0***	-460.0***
	(8.55e-12)	(8.06e-12)
Georgia	-1475.0***	-1475.0***
	(8.55e-12)	(8.06e-12)
Hawaii	-1358.5***	-1358.5***
	(8.55e-12)	(8.06e-12)
Idaho	-1339.0***	-1339.0***
	(8.55e-12)	(8.06e-12)
Illinois	-1377.2***	-1377.2***
	(8.55e-12)	(8.06e-12)
Indiana	-1895.0***	-1895.0***
	(8.57e-12)	(8.05e-12)
Iowa	-2875.0***	-2875.0***
	(8.57e-12)	(8.12e-12)
Kansas	-1921.2***	-1921.2***
	(8.55e-12)	(8.06e-12)

Kentucky	-1435.0***	-1435.0***
	(8.55e-12)	(8.06e-12)
Louisiana	-735.0***	-735.0***
	(8.55e-12)	(8.06e-12)
Maine	-1535.0***	-1535.0***
	(8.55e-12)	(8.06e-12)
Maryland	-1226.2***	-1226.2***
	(8.55e-12)	(8.06e-12)
Massachusetts	-1210.0***	-1210.0***
	(8.55e-12)	(8.06e-12)
Michigan	-1161.0***	-1161.0***
	(8.55e-12)	(8.06e-12)
Minnesota	-1672.2***	-1672.2***
	(8.55e-12)	(8.06e-12)
Mississippi	-1185.0***	-1185.0***
	(8.55e-12)	(8.06e-12)
Missouri	-2432.5***	-2432.5***
	(8.57e-12)	(8.05e-12)
Montana	-1583.0***	-1583.0***
	(8.55e-12)	(8.06e-12)
Nebraska	-1842.5***	-1842.5***
	(8.57e-12)	(8.05e-12)
Nevada	-1348.0***	-1348.0***
	(8.55e-12)	(8.06e-12)
New Hampshire	-1835.0***	-1835.0***
	(8.55e-12)	(8.06e-12)
New Jersey	-952.5***	-952.5***
	(8.57e-12)	(8.05e-12)
New Mexico	-373.0***	-373.0***
	(8.55e-12)	(8.06e-12)
New York	-723.7***	-723.7***
	(8.57e-12)	(8.05e-12)
North Carolina	-2238.7***	-2238.7***
	(8.57e-12)	(8.05e-12)
North Dakota	-1922.5***	-1922.5***
	(8.57e-12)	(8.05e-12)
Ohio	-884.5***	-884.5***
	(8.55e-12)	(8.06e-12)

Oklahoma	-1722.5***	-1722.5***
	(8.55e-12)	(8.06e-12)
Oregon	-1710.0***	-1710.0***
	(8.55e-12)	(8.06e-12)
Pennsylvania	-211.7***	-211.7***
	(8.57e-12)	(8.05e-12)
Rhode Island	-1397.5***	-1397.5***
	(8.55e-12)	(8.06e-12)
South Carolina	-1880.0***	-1880.0***
	(8.55e-12)	(8.06e-12)
South Dakota	-1681.5***	-1681.5***
	(8.55e-12)	(8.06e-12)
Tennessee	-553.5***	-553.5***
	(8.55e-12)	(8.06e-12)
Texas	0	0
	(.)	(.)
Utah	-854.5***	-854.5***
	(8.55e-12)	(8.06e-12)
Vermont	-1368.7***	-1368.7***
	(8.55e-12)	(8.06e-12)
Virginia	-1150.0***	-1150.0***
	(8.55e-12)	(8.06e-12)
Washington	-1814.5***	-1814.5***
	(8.55e-12)	(8.06e-12)
West Virginia	-1305.0***	-1305.0***
	(8.55e-12)	(8.06e-12)
Wisconsin	-1357.5***	-1357.5***
	(8.55e-12)	(8.06e-12)
Wyoming	-1495.0***	-1495.0***
	(8.55e-12)	(8.06e-12)
amount600		590.3***
		(40.56)
Constant	3035.0***	2739.8***
	(8.55e-12)	(20.28)
Observation	192	192
R^2	0.705	0.909

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 2.3.13 Regression Results of the Variance for Owner's Title Insurance

	(1) Owner's title insurance	(2) Owner's title insurance	(3) Owner's title insurance
Loan amount is	590.3***	590.3***	596.7***
$600,000	(34.82)	(35.19)	(36.61)
Use and file		55.16	0.658
		(199.5)	(193.8)
File and use		-60.29	-97.12
		(171.9)	(177.3)
Prior approval		73.89	42.49
		(203.6)	(201.0)
Promulgated		1079.0***	1021.2***
		(186.7)	(216.8)
Premiums & examination			-130.0
			(444.3)
Premiums, search and examination			132.6
			(156.3)
Comprehensive			16.52
			(169.3)
Constant	1437.7***	1383.2***	1404.7***
	(63.85)	(138.7)	(118.0)
Observation	192	192	184
R^2	0.204	0.373	0.376

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

2.4 Conclusion

This report has sought to explain why title-related charges vary among all states in the U.S. The approach has been to use three parallel investigations with three independent data sources: the HUD-1 database, title charge quotations from Bank of America website; and title charge quotations from the Stewart website. The regression results from these three databases are comparable, parallel and robust.

Texas total title charge from the HUD-1 database is significantly higher than that of 45 states and District of Columbia on average. Only the total title charges in California, Connecticut, New Jersey and New York are higher than the total title charges in Texas. All the other Texas' title charges in the report are all higher than those of other states, including: (a) Texas' premiums plus endorsement cost from the HUD-1 database; (b) Texas' lender's title insurance plus endorsement cost from the quotations on BOA Website; (c) Texas' lender's title insurance from the quotations on Stewart's website; (d) Texas' simultaneous title insurance from the quotations on Stewart's website; and (e) Texas' owner's title insurance from time-series quotations on Stewart's website.

Regulation type is the most significant independent variable to explain why title related charges vary across the states. The states with promulgated rate, such as Texas, have significantly higher total title charges, lender's title insurance, lender's title insurance plus endorsement and simultaneous title insurance than the states without any active

regulation. A possible explanation is that promulgated set a floor on price, reduces and even eliminates price competition, and leads to high costs. Therefore, higher title related charges in Texas can be explained partially by that fact that Texas clings to promulgated rate regulation. The variable "comprehensive service coverage" does not explain the variation of the premiums plus endorsement, the lender's title insurance plus endorsement, the lender's title insurance and simultaneous title insurance. Service coverage does not explain difference in state premiums. It also means that Texas' comprehensive services covered by Texas' premiums is not a significant factor that can explain the high premiums in Texas. Title related charges are positively related with loan amount or property value. The higher the loan amount or property value, the higher title insurance. The total title related charges and premiums plus endorsements are also associated with median house price in each state. Table 2.4.1 summarizes all the regression results of title insurance related charges from the HUD-1 database, Bank of America website and Stewart's website.

The regulation types, service coverage, loan amount and states' characteristics can explain between 35 percent and 71 percent of the variance of title related charges across all the states, depending on the data source and the dependent variable. The remaining variation of title related charges could perhaps be explained by other characteristics, if other data would be available.

Table 2.4.1 Summary of all the regression results

	(1) Total title charge	(2) Premium plus endorsement	(3) Lender's plus endorsement	(4) Lender's title insurance	(5) Simultaneous title insurance
Loan Amount	0.00198***	0.00168***			
	(0.000261)	(0.000250)			
Loan Amount Square	-0.0000081***	-0.000005***			
	(0.000001)	(0.0000011)			
Loan amount is $400,000			526.1***	529.3***	600.2***
			(33.97)	(35.50)	(69.45)
Loan amount is $600,000				1045.1***	1192.7***
				(68.10)	(77.15)
Loan amount is $800,000				1500.2***	1764.9***
				(96.64)	(109.2)
Loan amount is $1,000,000				1952.5***	2325.4***
				(126.5)	(145.3)
File and use	-110.6	43.07	28.32	-144.1	-100.2
	(70.66)	(50.72)	(251.9)	(191.6)	(248.1)
Use and file	-163.7*	120.0*	29.61	-27.32	-231.5
	(82.81)	(60.94)	(205.9)	(262.3)	(303.7)
Prior approval	25.22	-36.15	162.0	356.3	-59.95
	(111.4)	(138.2)	(210.2)	(275.7)	(308.3)
Promulgated Rates	291.7*	479.3***	828.5***	1662.5***	1079.2**
	(146.4)	(78.68)	(246.6)	(359.6)	(500.1)
Examination & premium	-94.40	124.4***	-231.4	814.5***	1248.3***
	(91.06)	(42.21)	(207.0)	(182.9)	(233.3)
Examination, search & premium	11.50	200.2**	70.97	-50.57	670.9
	(89.40)	(95.00)	(108.4)	(161.9)	(481.1)
Comprehensive	28.66	23.15	189.1	24.82	-124.8
	(124.8)	(101.7)	(146.7)	(189.8)	(201.9)
Median income	-0.000795	0.00565	-0.00828	-0.00765	-0.00766
	(0.00526)	(0.00510)	(0.00703)	(0.00814)	(0.0106)
Median house price	0.00585***	0.00199**	0.00126	0.00172*	0.00166
	(0.00108)	(0.000962)	(0.000989)	(0.00103)	(0.00154)
Constant	361.9**	-126.2	836.0**	625.6	1069.4*
	(178.8)	(156.5)	(372.3)	(425.0)	(535.3)
R^2	0.354	0.387	0.446	0.712	0.659
Observations	9288	9288	102	225	245
Data Source	HUD-1 database	HUD-1 database	Bank of America	Stewart	Stewart

Robust and state cluster standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Reference

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Appendix

This appendix includes 350 figures of seven title-related variables, by state.

Figure 1.3.1 to Figure 1.3.50: Total Title Charges, by State

Figure 1.4.1 to Figure 1.4.50: Owner's Policy Coverage Premium, by State

Figure 1.5.1 to Figure 1.5.50: Lender's Policy Coverage Premium, by State

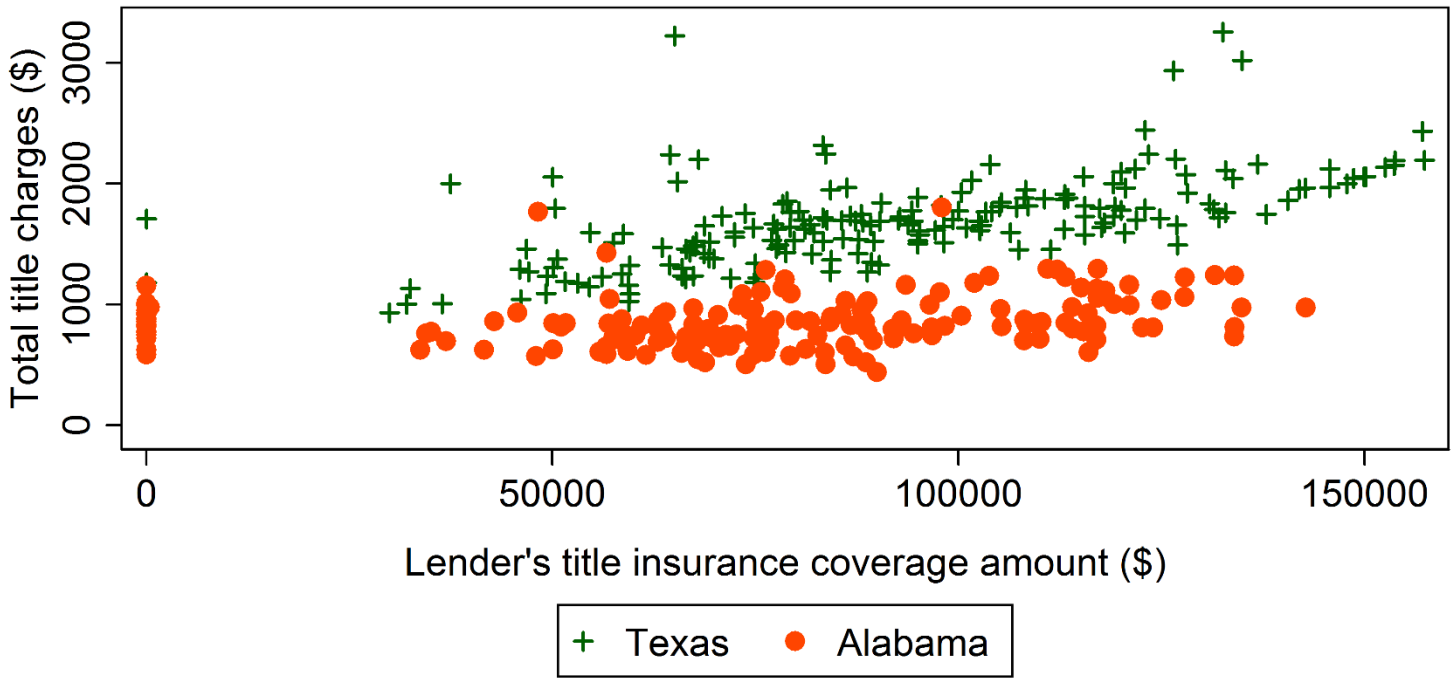
Figure 1.6.1 to Figure 1.6.50: Premium Plus Endorsement Costs, by State

Figure 1.7.1 to Figure 1.7.50: Endorsement Costs, by State

Figure 1.8.1 to Figure 1.8.50: Attorney Fees, by State

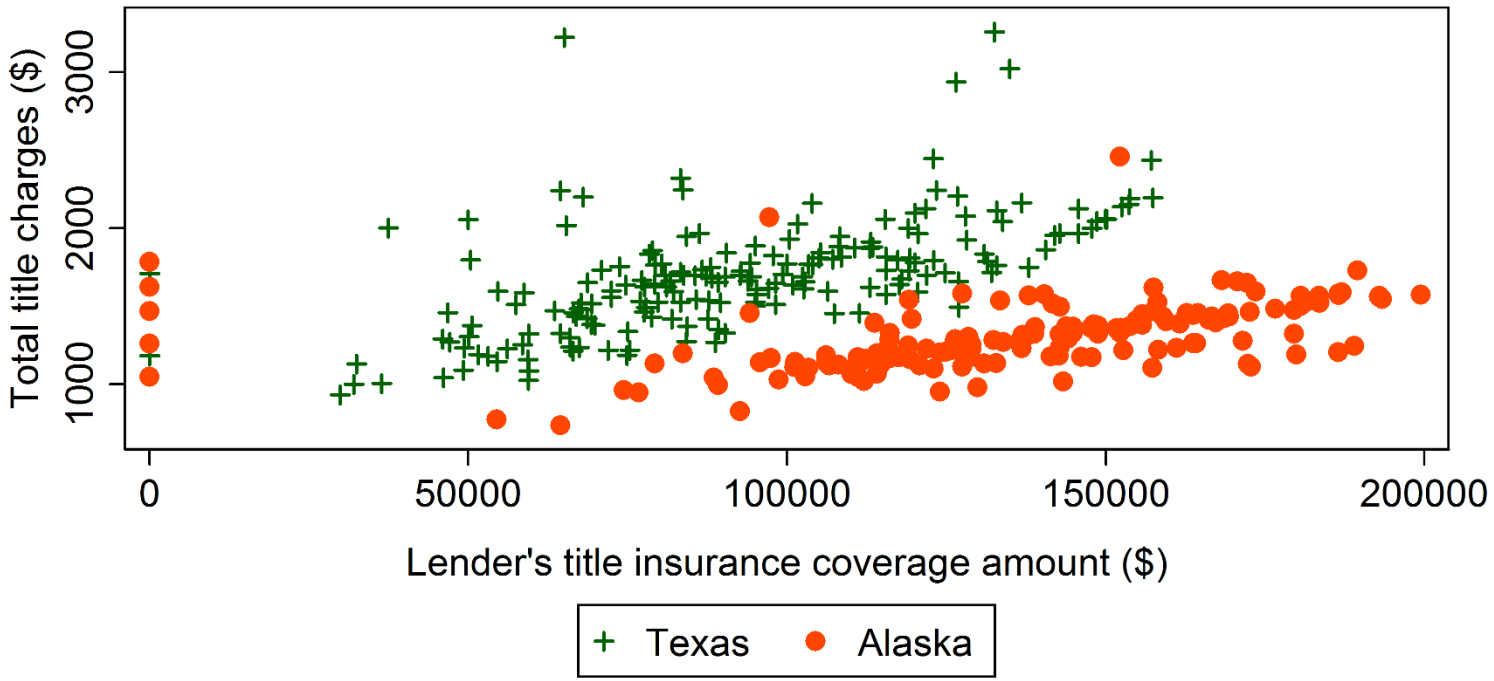
Figure 1.9.1 to Figure 1.9.50: Net Service Fees, by State

Figure 1.3.1 Comparison of Total Title Charges Between Texas and Alabama



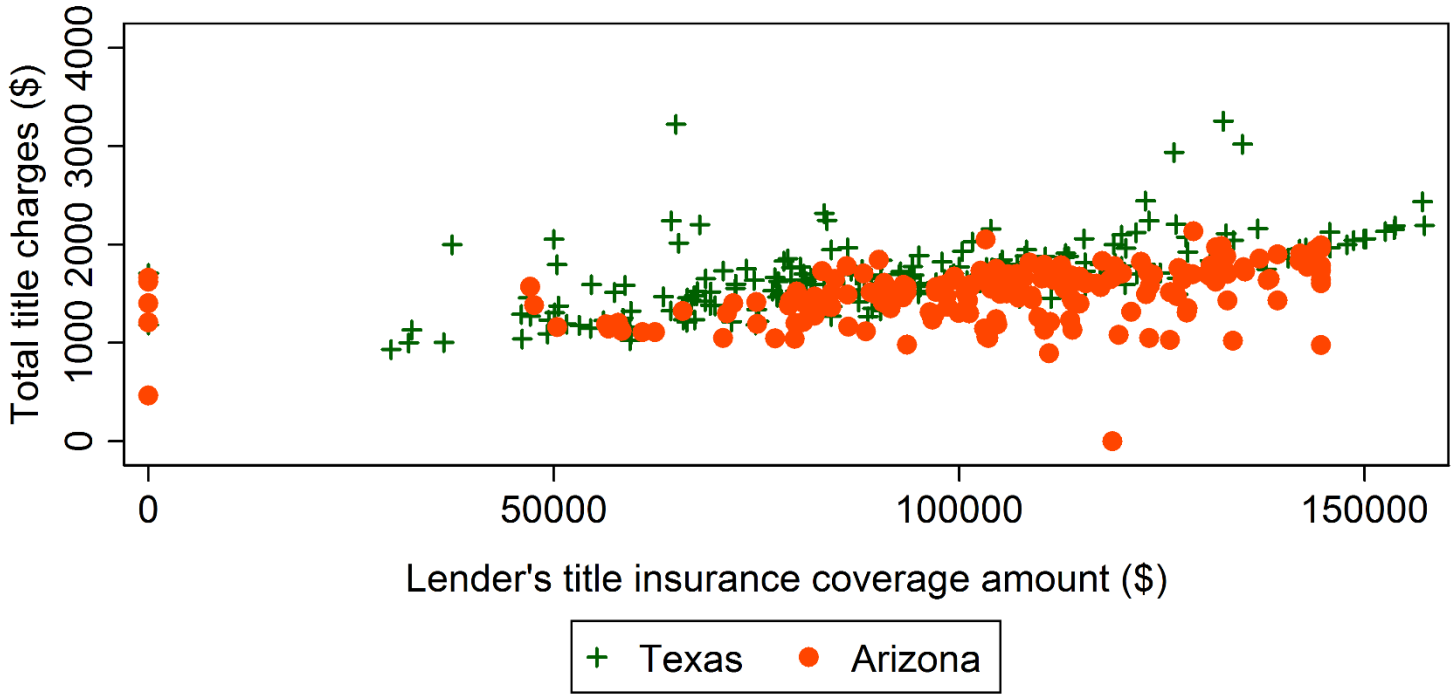
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.2 Comparison of Total Title Charges Between Texas and Alaska



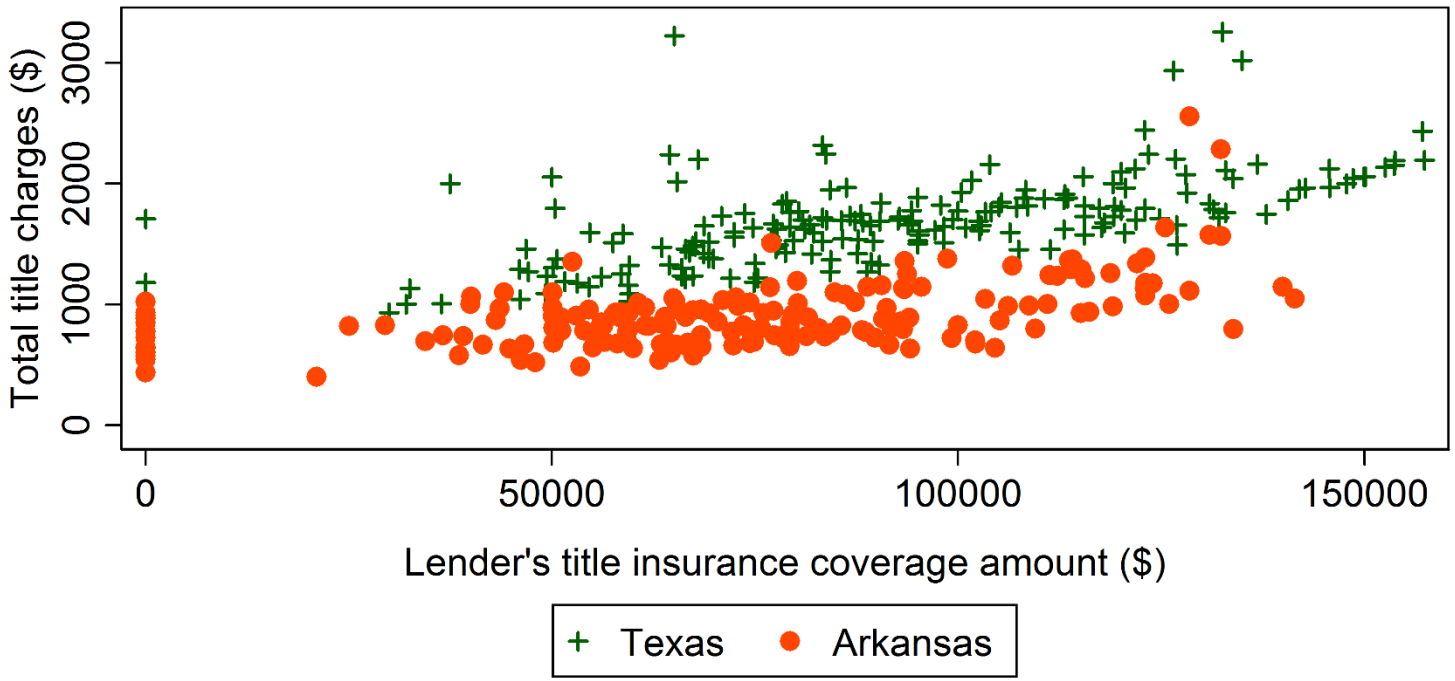
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.3 Comparison of Total Title Charges Between Texas and Arizona



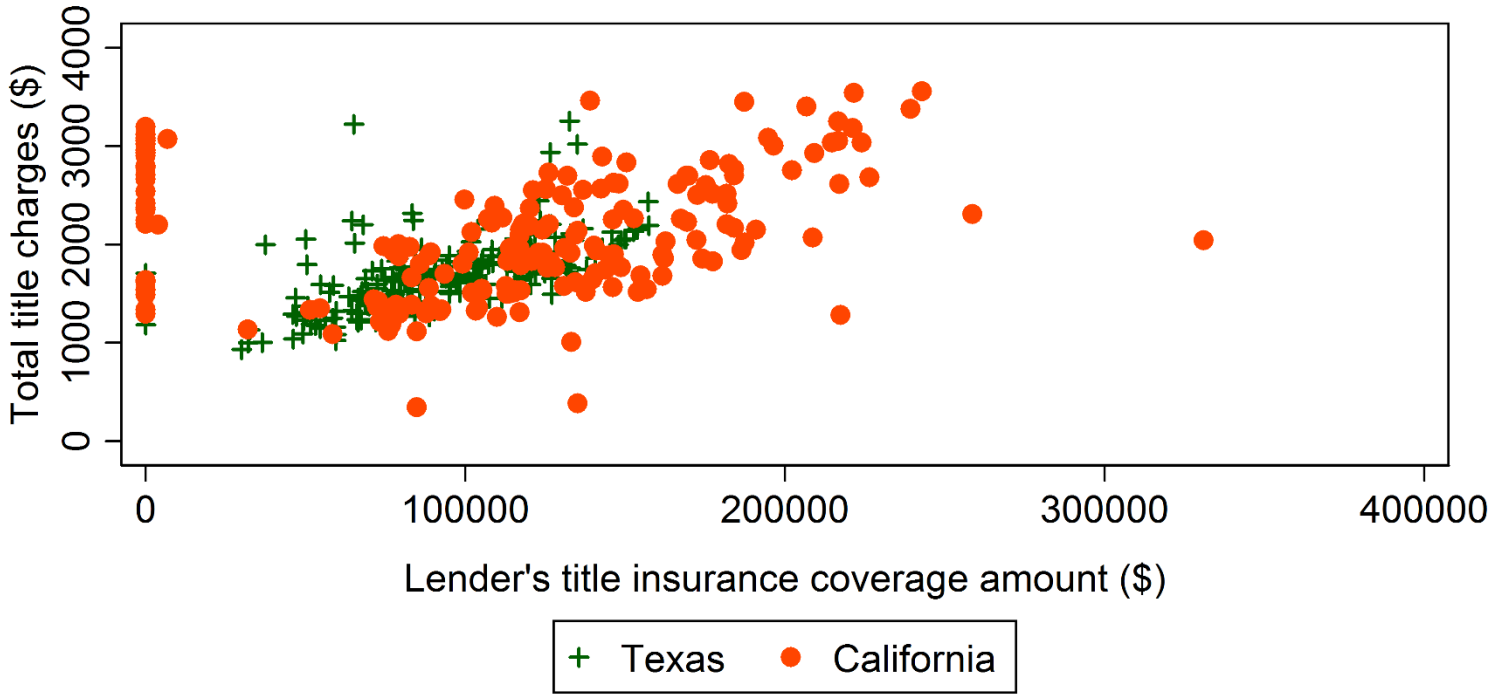
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.4 Comparison of Total Title Charges Between Texas and Arkansas



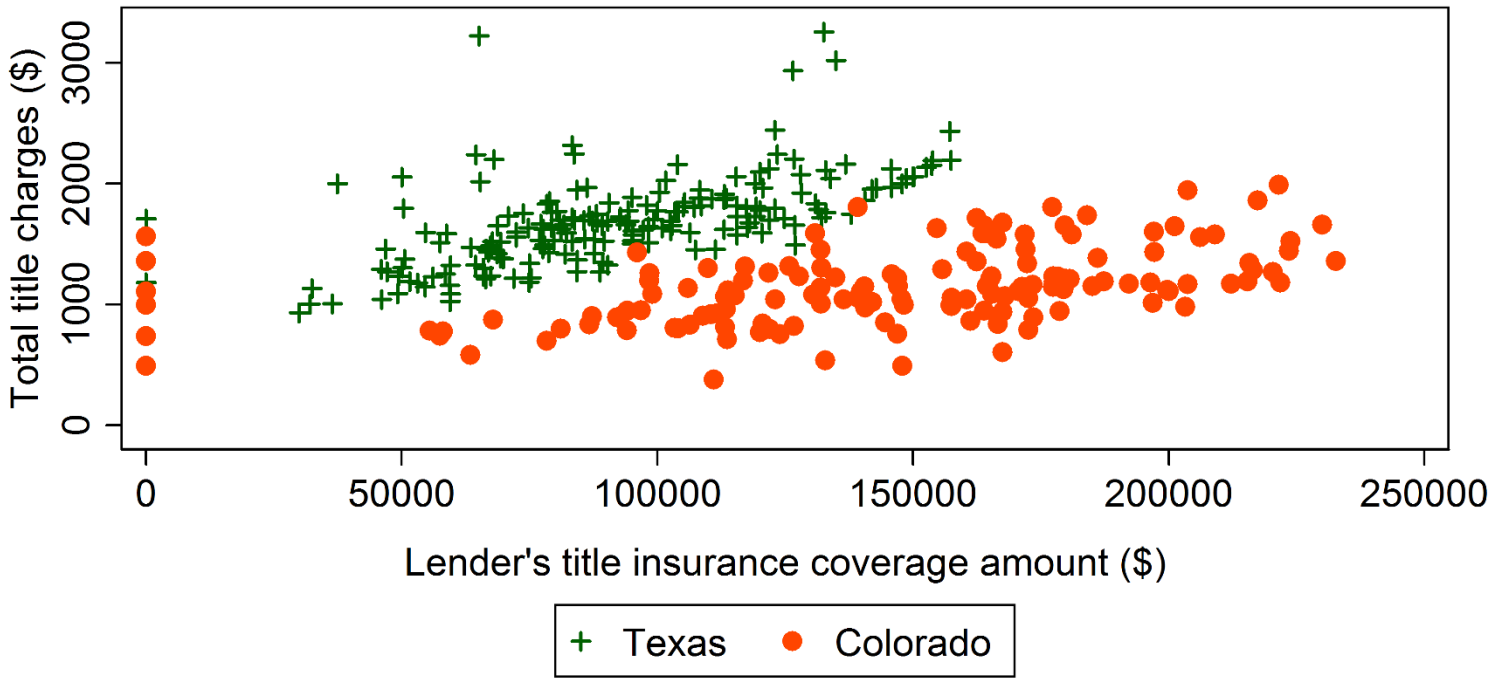
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.5 Comparison of Total Title Charges Between Texas and California



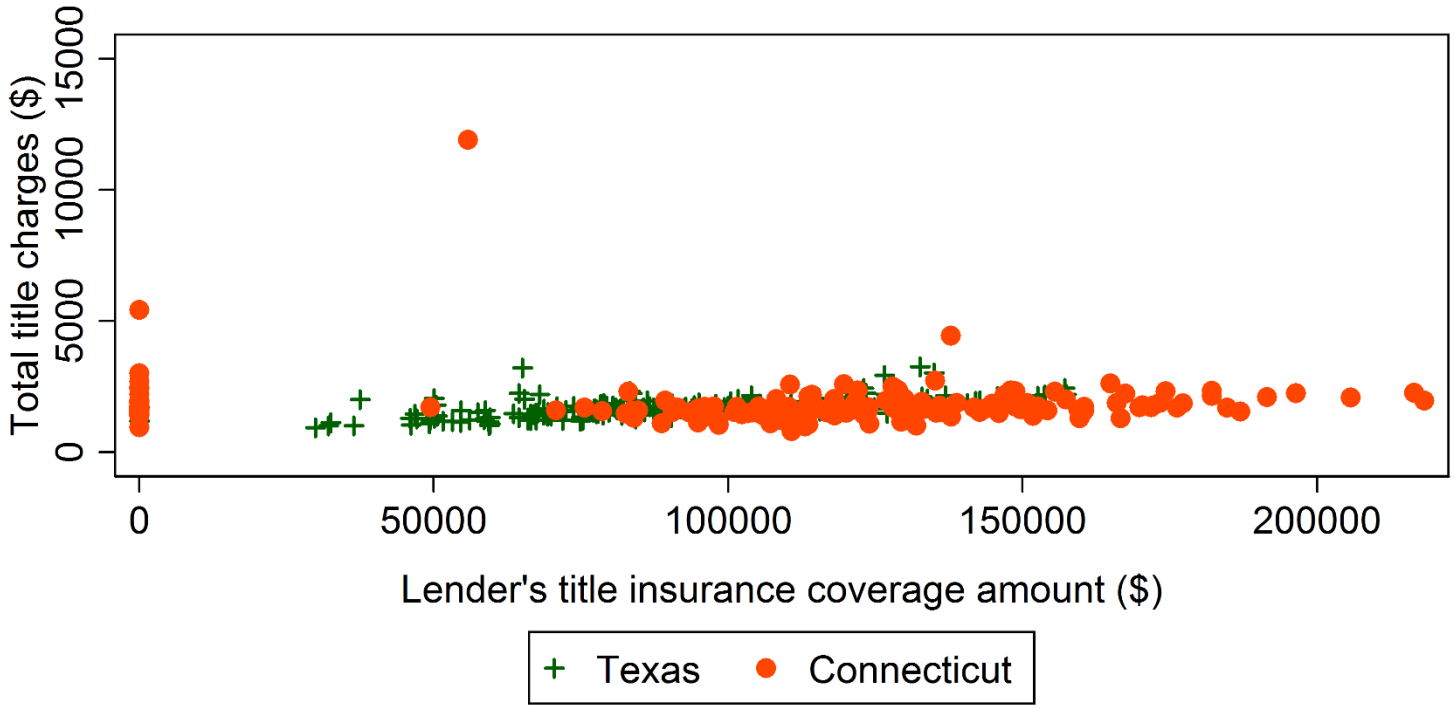
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.6 Comparison of Total Title Charges Between Texas and Colorado



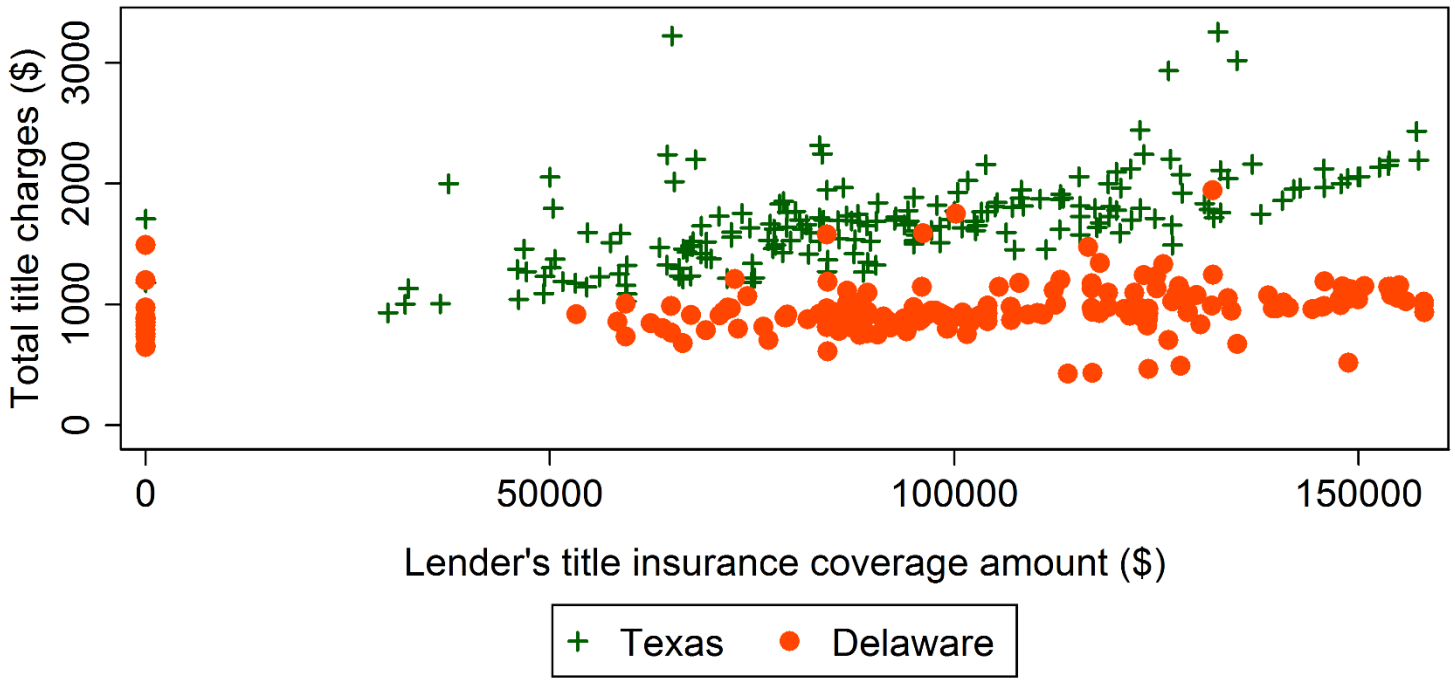
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.7 Comparison of Total Title Charges Between Texas and Connecticut



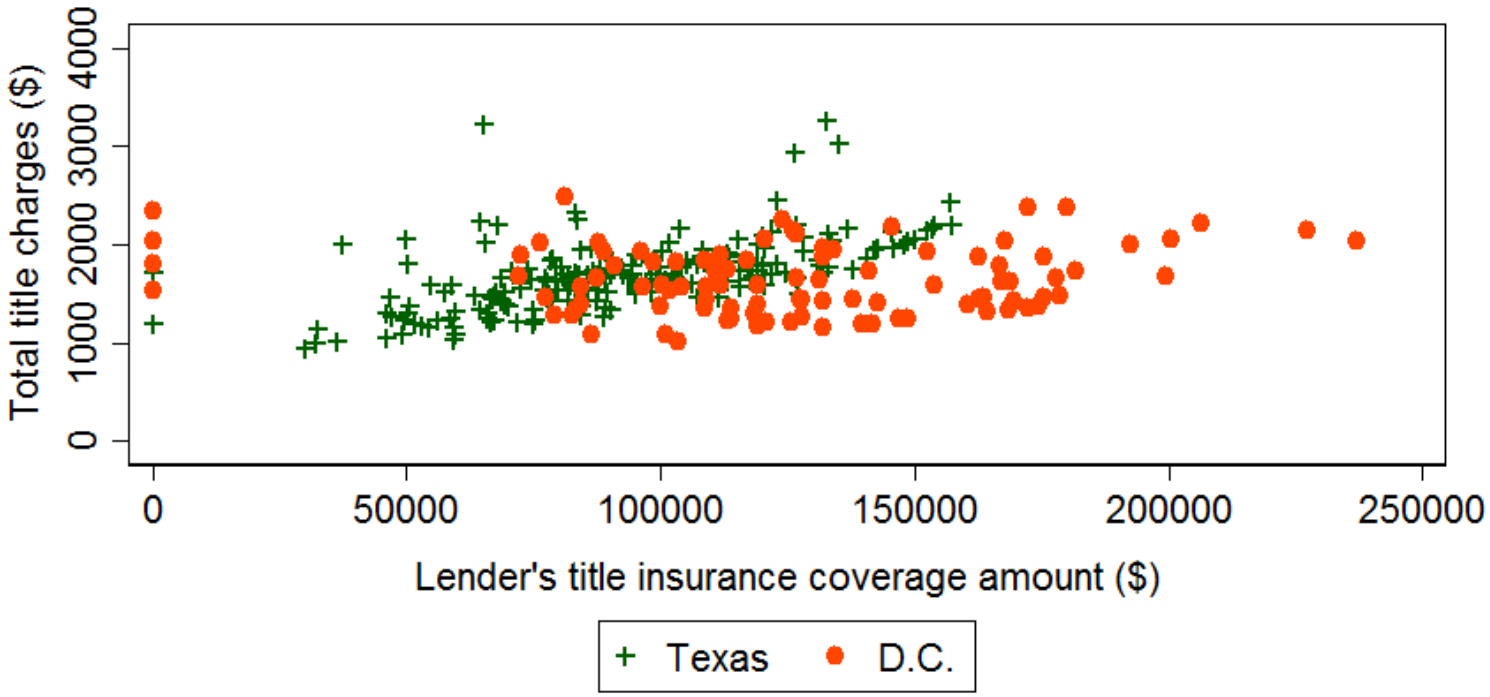
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.8 Comparison of Total Title Charges Between Texas and Delaware



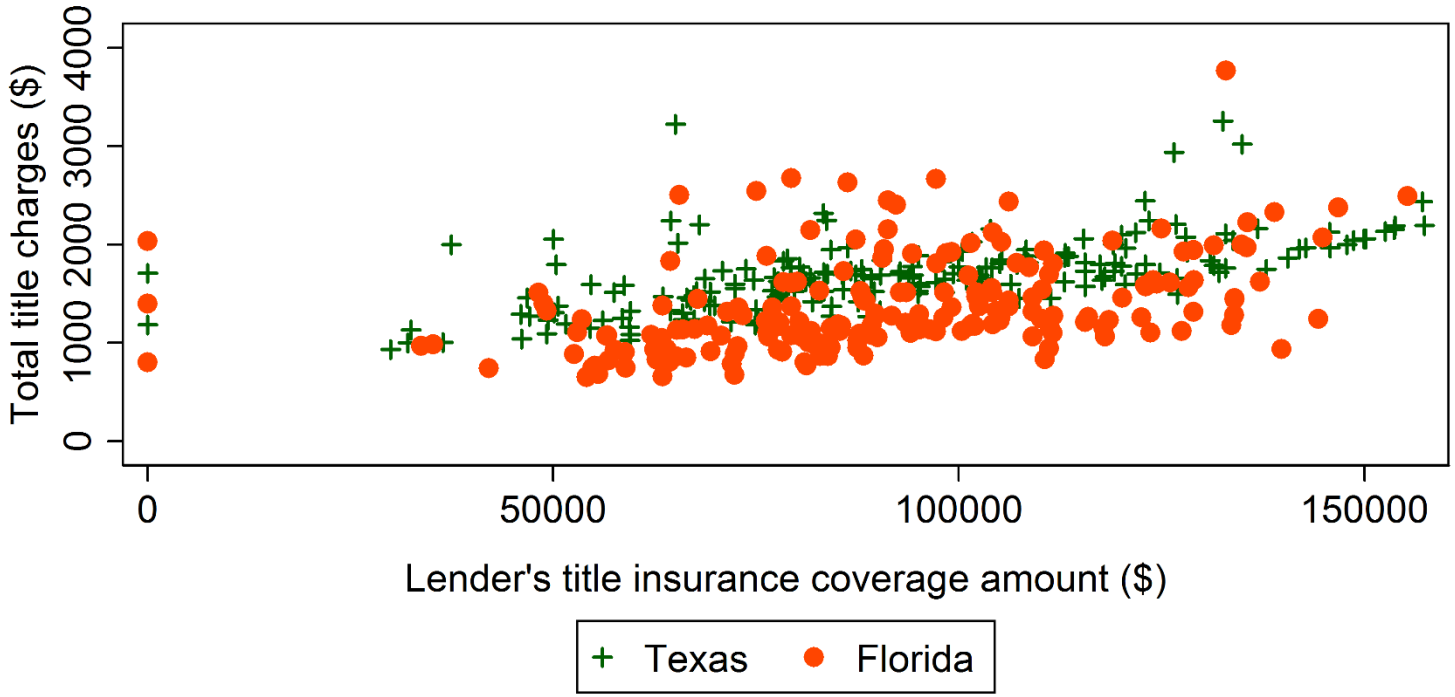
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.9 Comparison of Total Title Charges Between Texas and D.C.



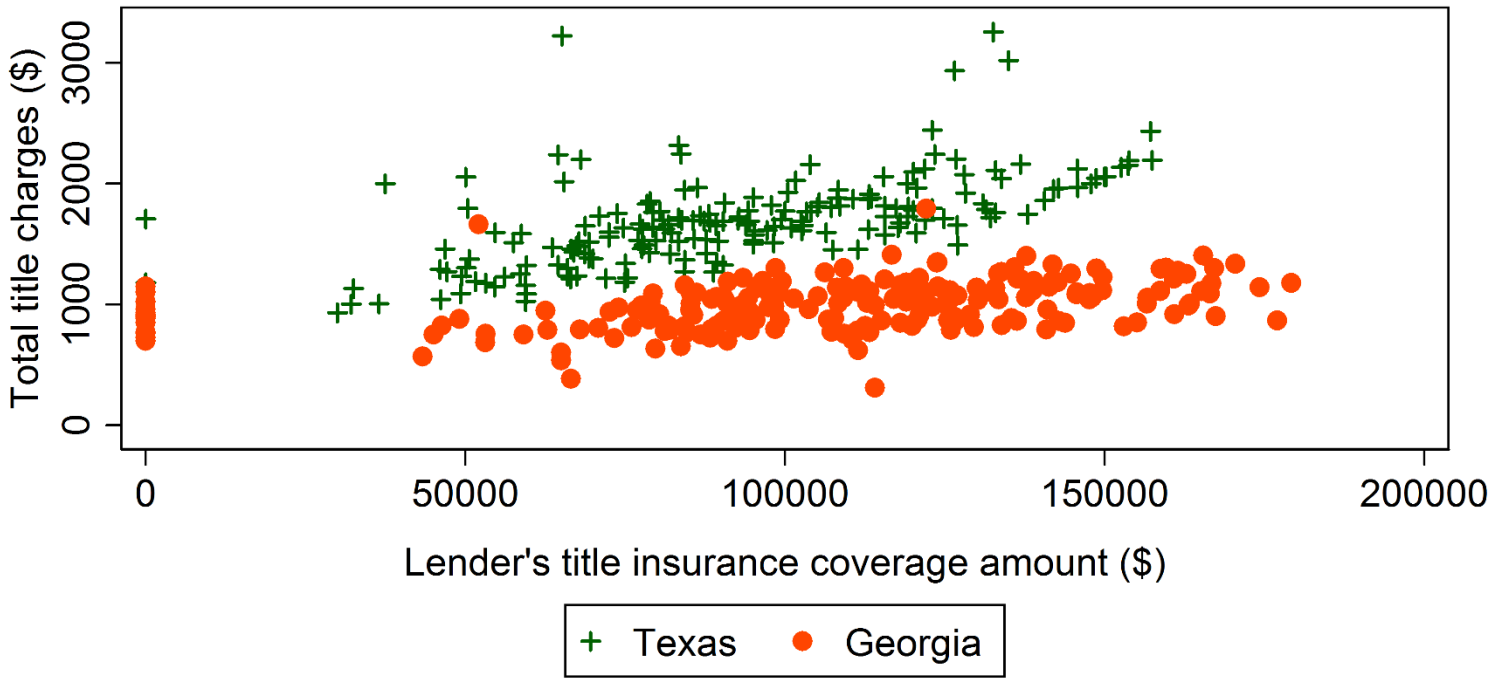
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.10 Comparison of Total Title Charges Between Texas and Florida



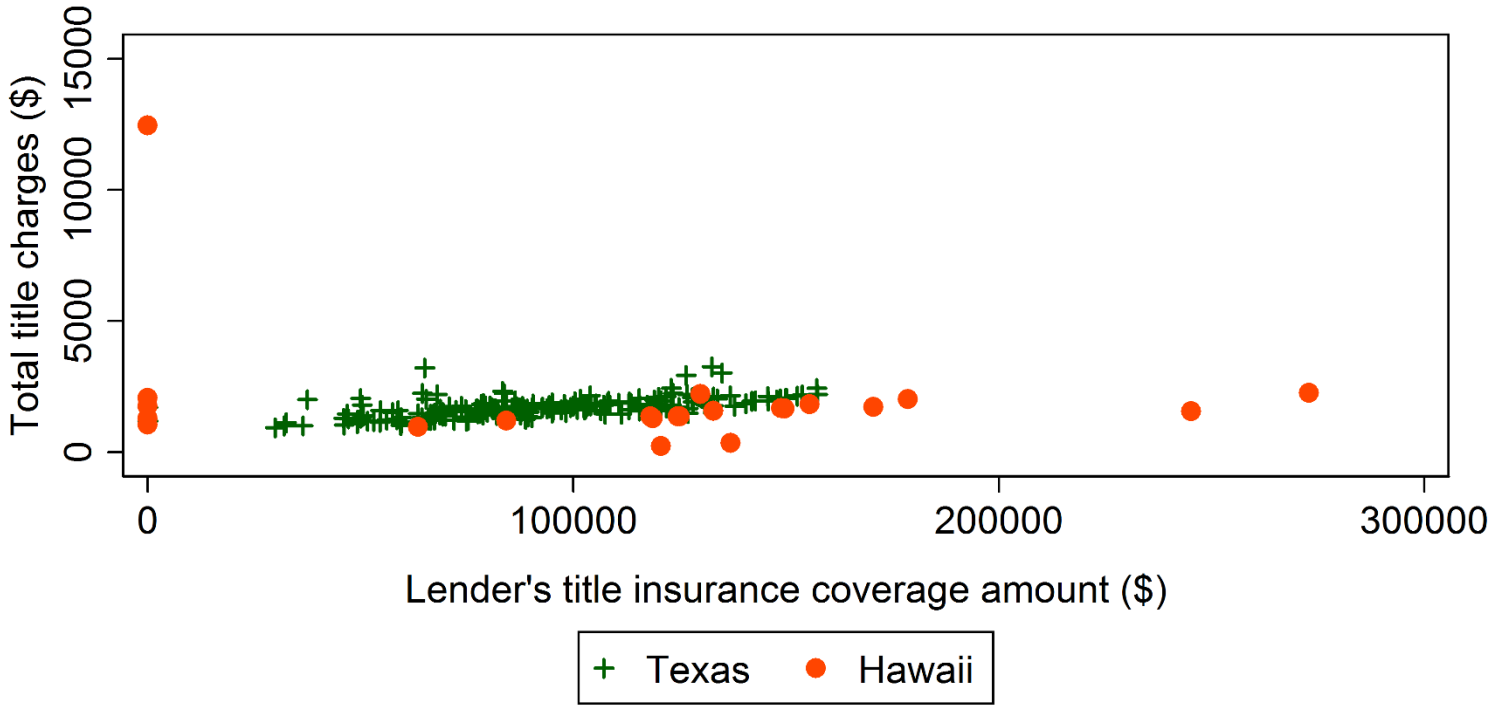
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.11 Comparison of Total Title Charges Between Texas and Georgia



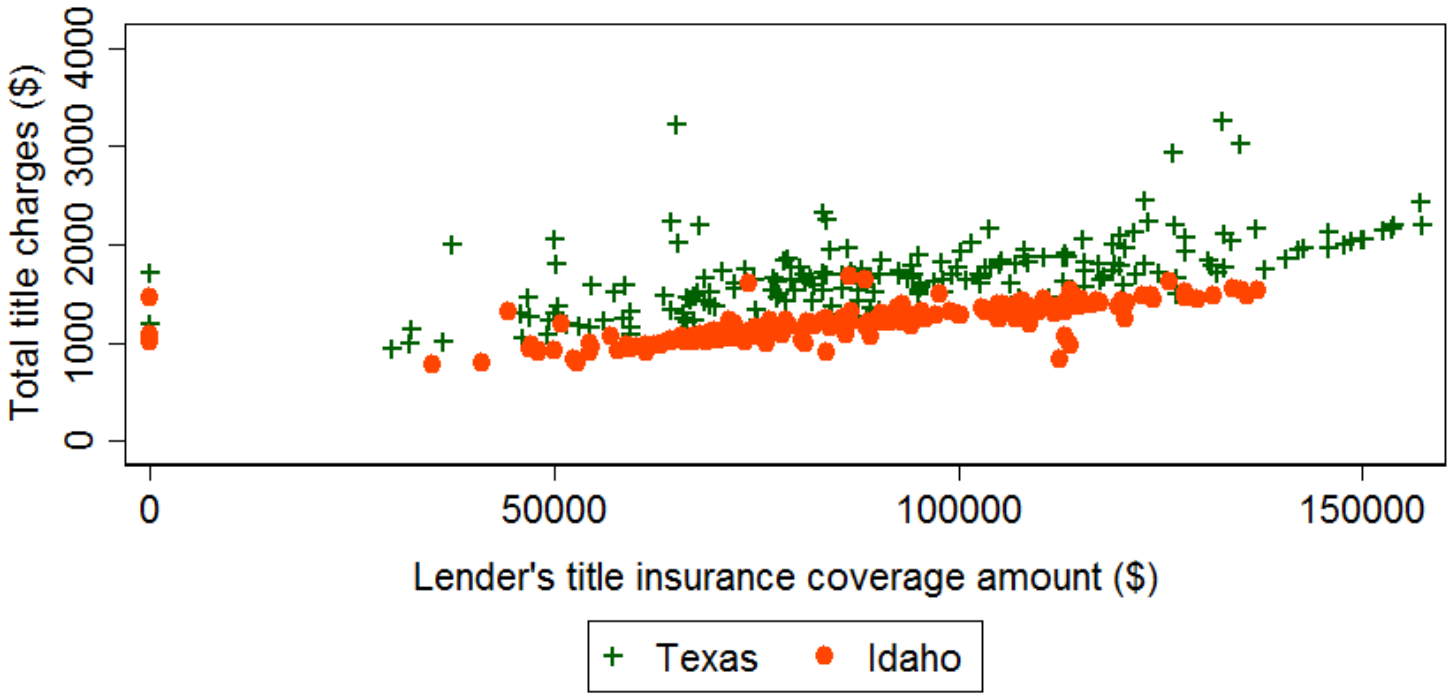
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.12 Comparison of Total Title Charges Between Texas and Hawaii



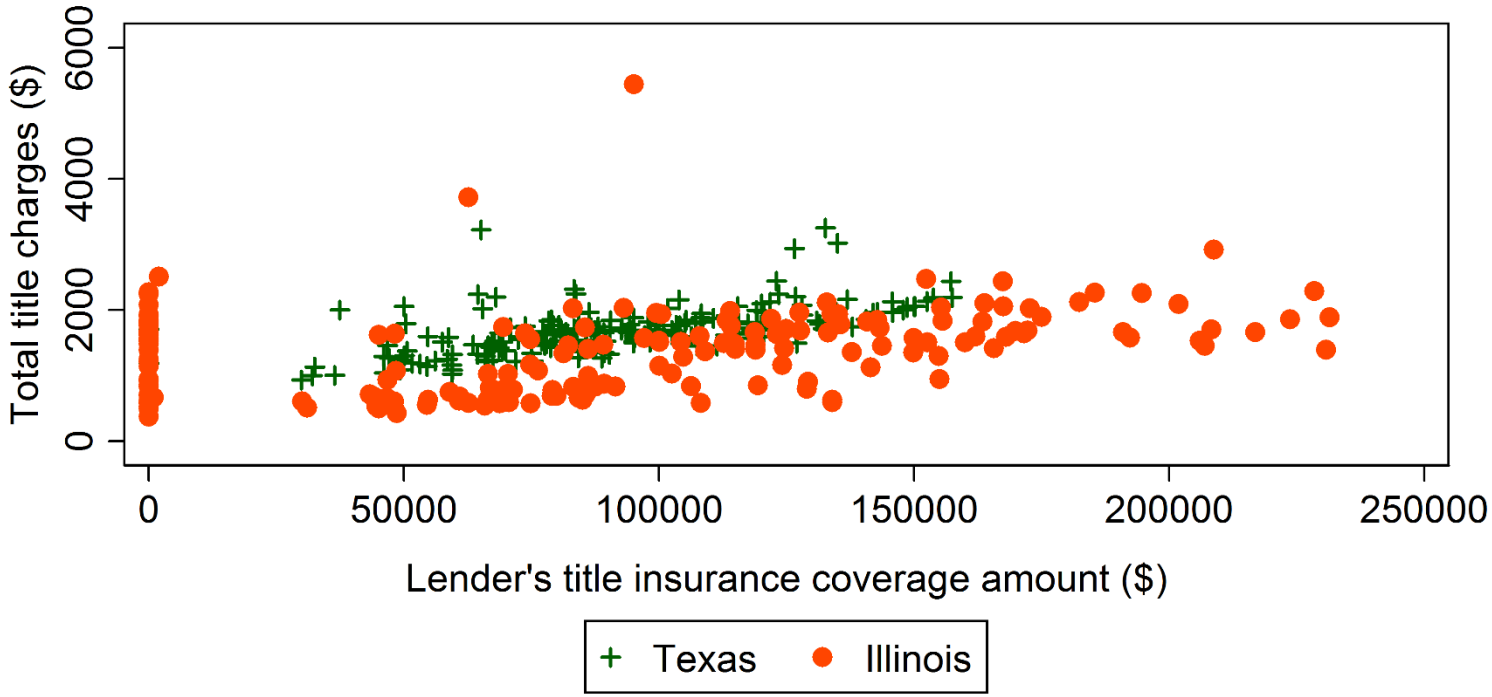
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.13 Comparison of Total Title Charges Between Texas and Idaho



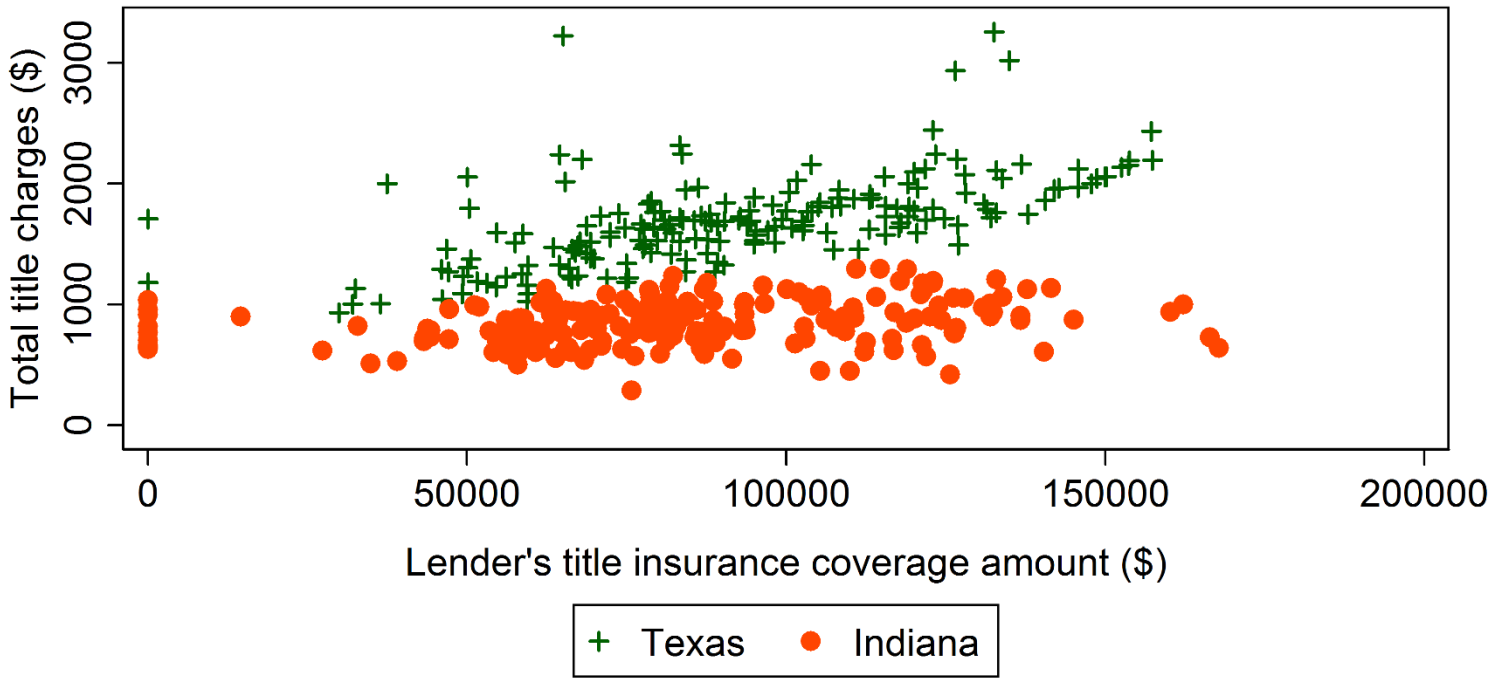
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.14 Comparison of Total Title Charges Between Texas and Illinois



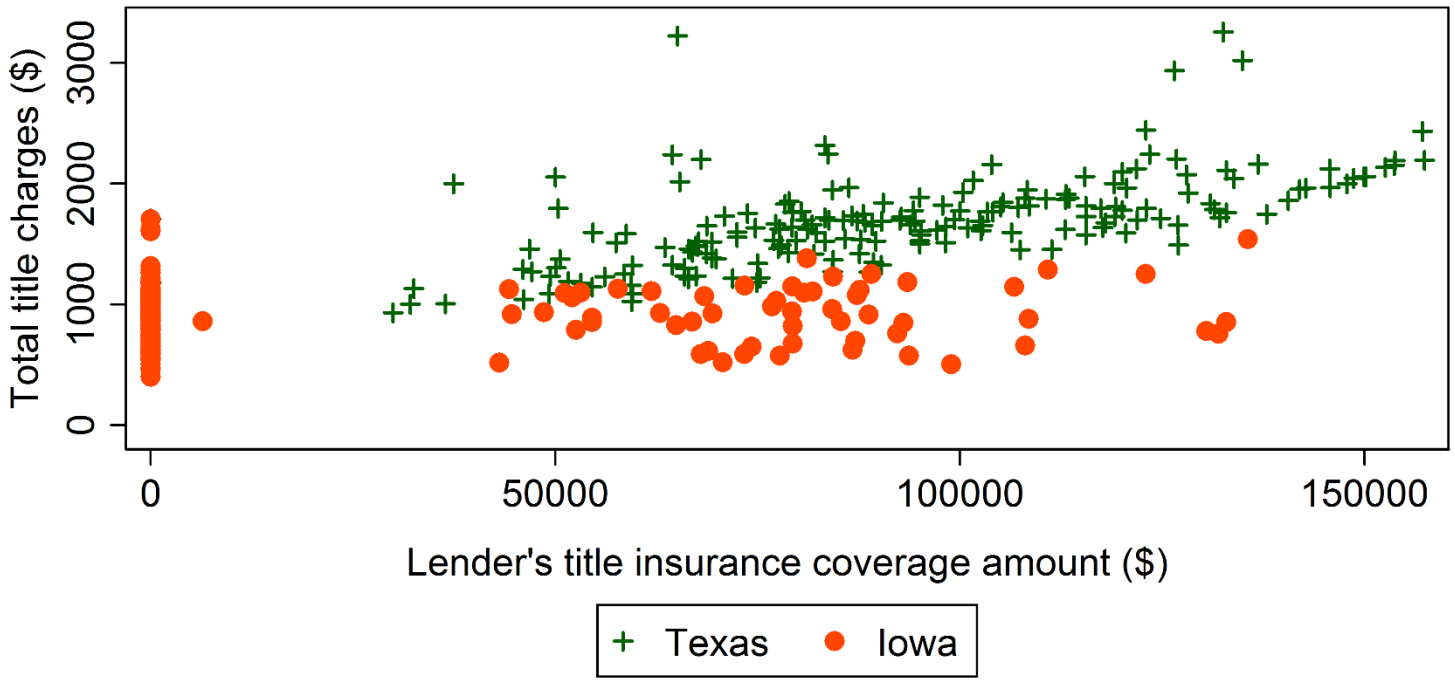
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.15 Comparison of Total Title Charges Between Texas and Indiana



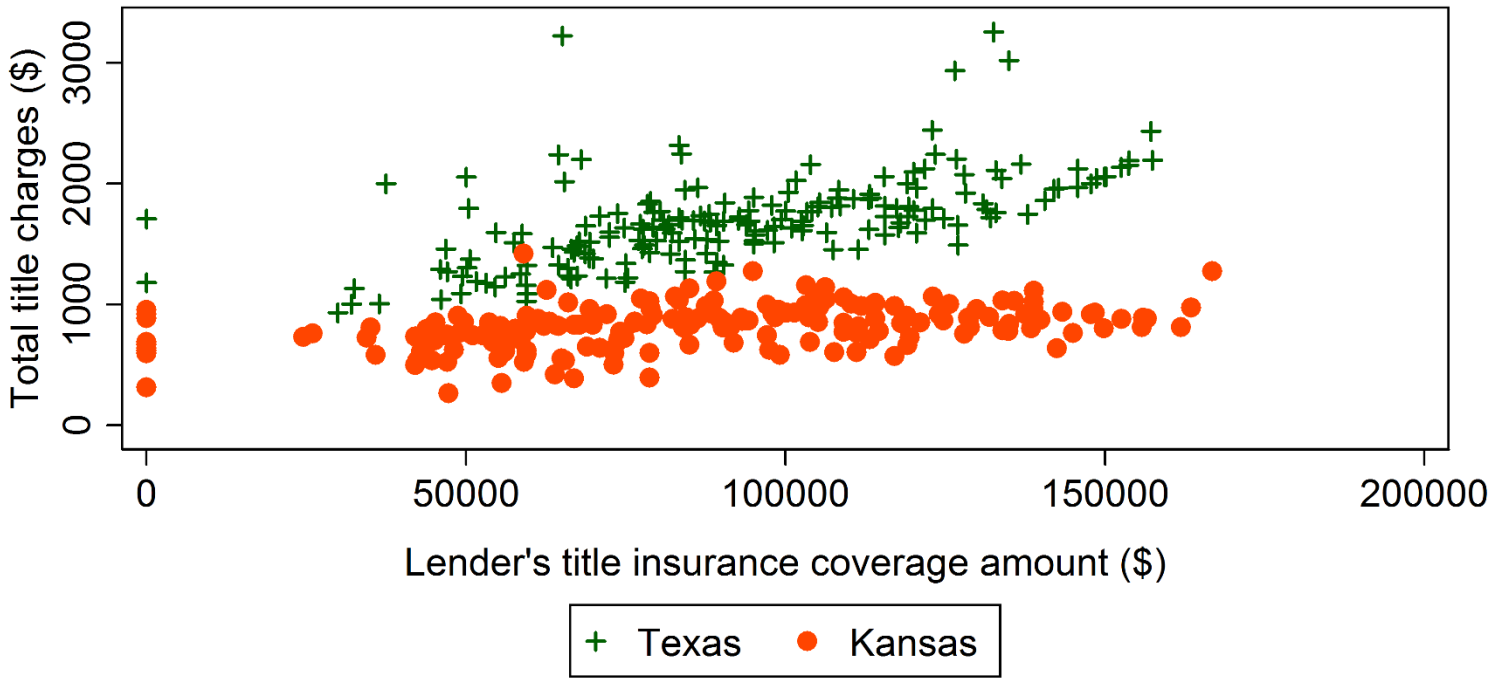
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.16 Comparison of Total Title Charges Between Texas and Iowa



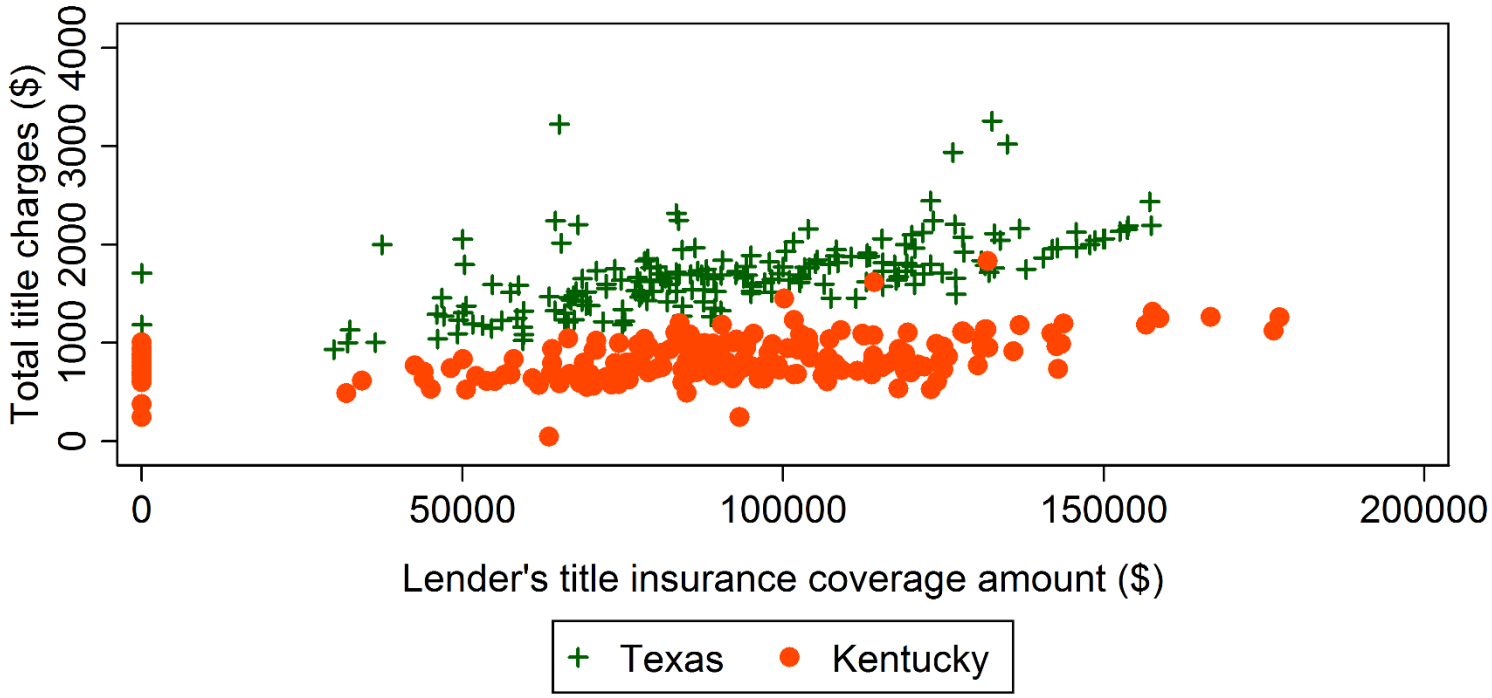
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.17 Comparison of Total Title Charges Between Texas and Kansas



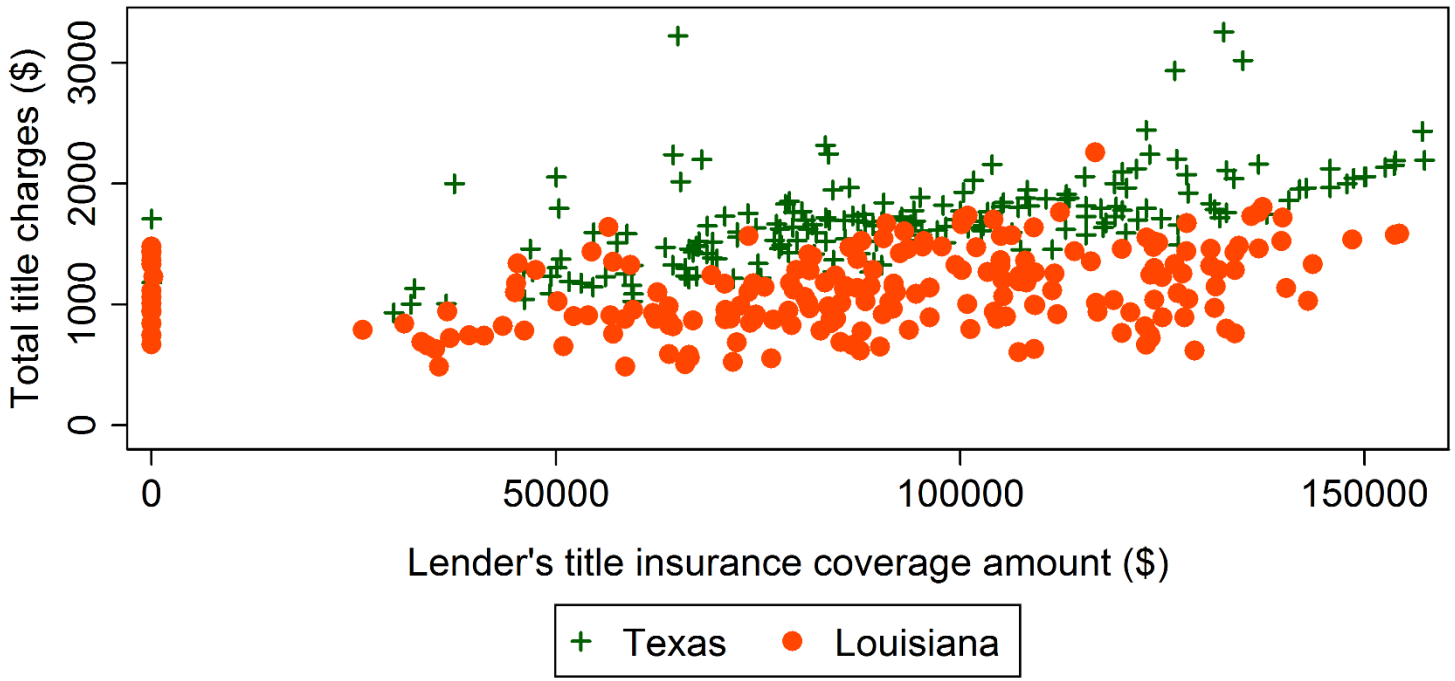
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.18 Comparison of Total Title Charges Between Texas and Kentucky



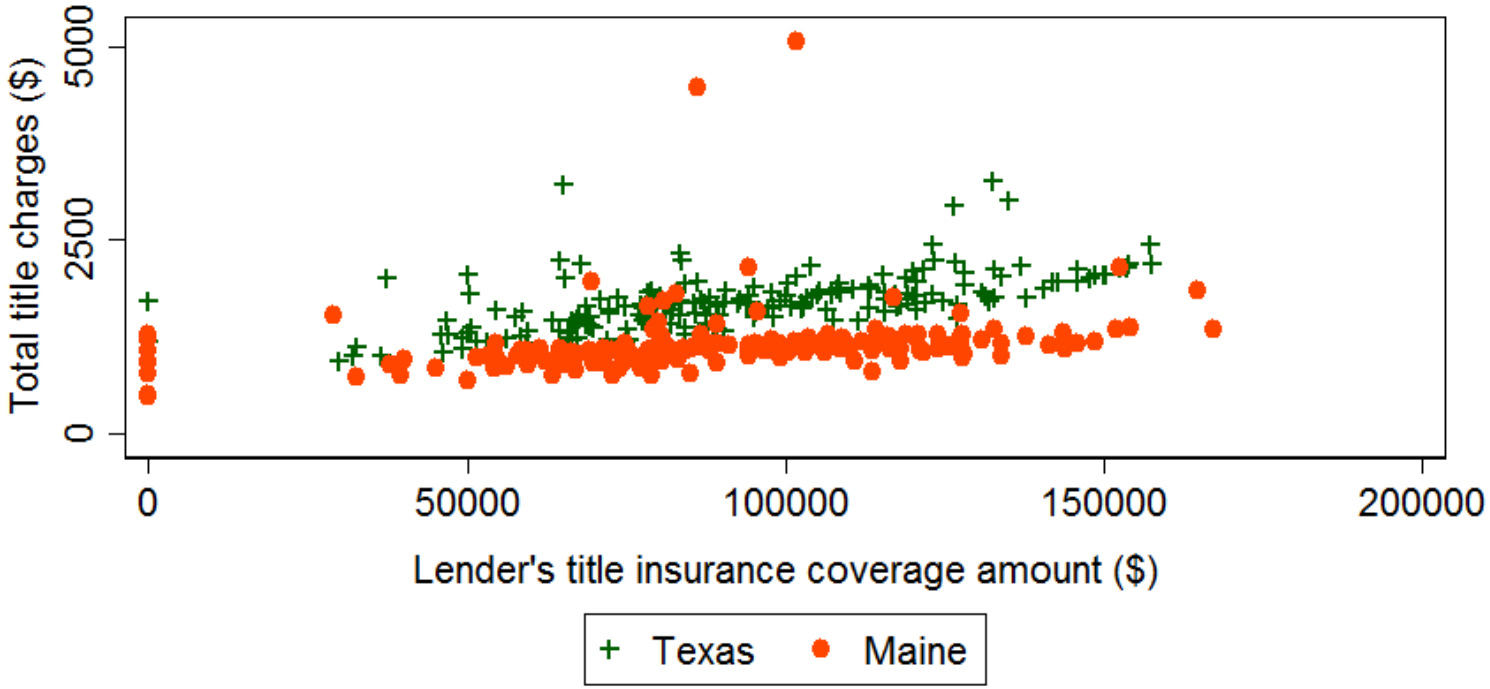
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.19 Comparison of Total Title Charges Between Texas and LA



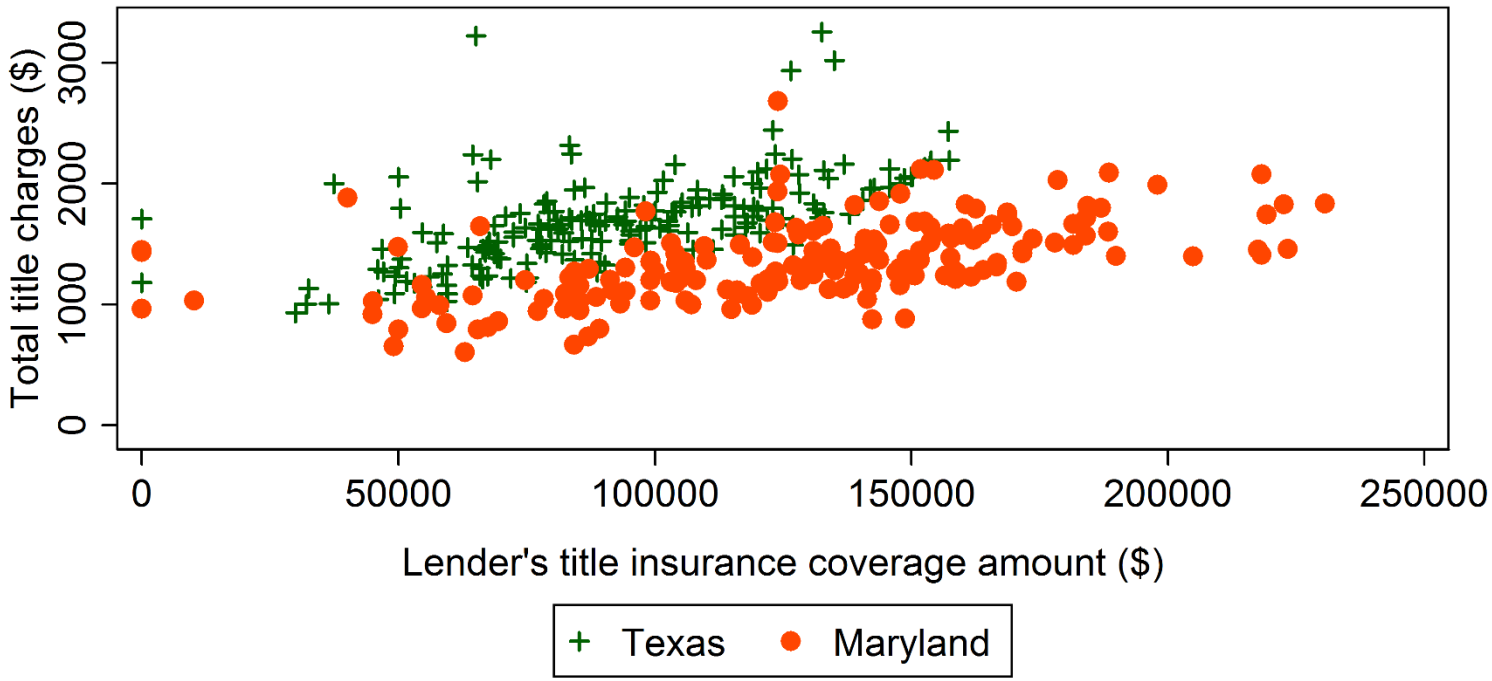
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.20 Comparison of Total Title Charges Between Texas and Maine



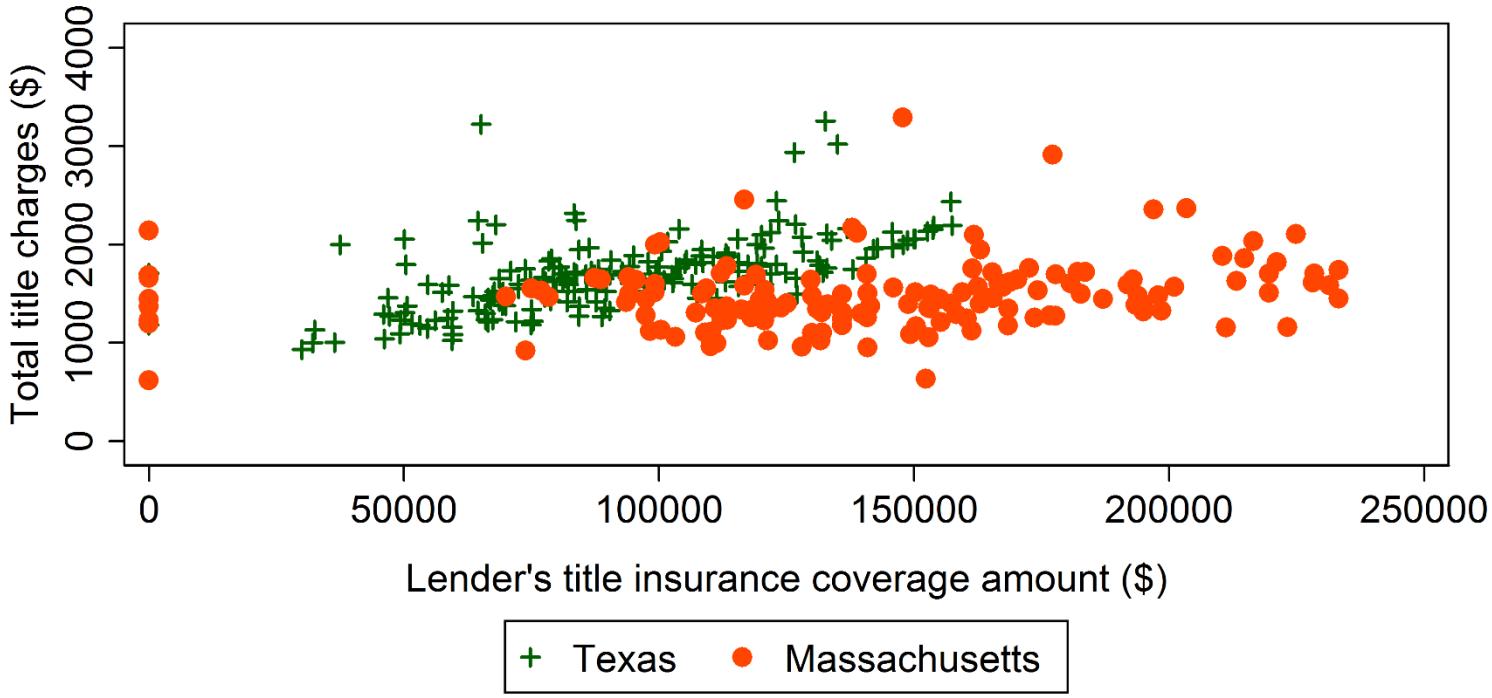
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.21 Comparison of Total Title Charges Between Texas and Maryland



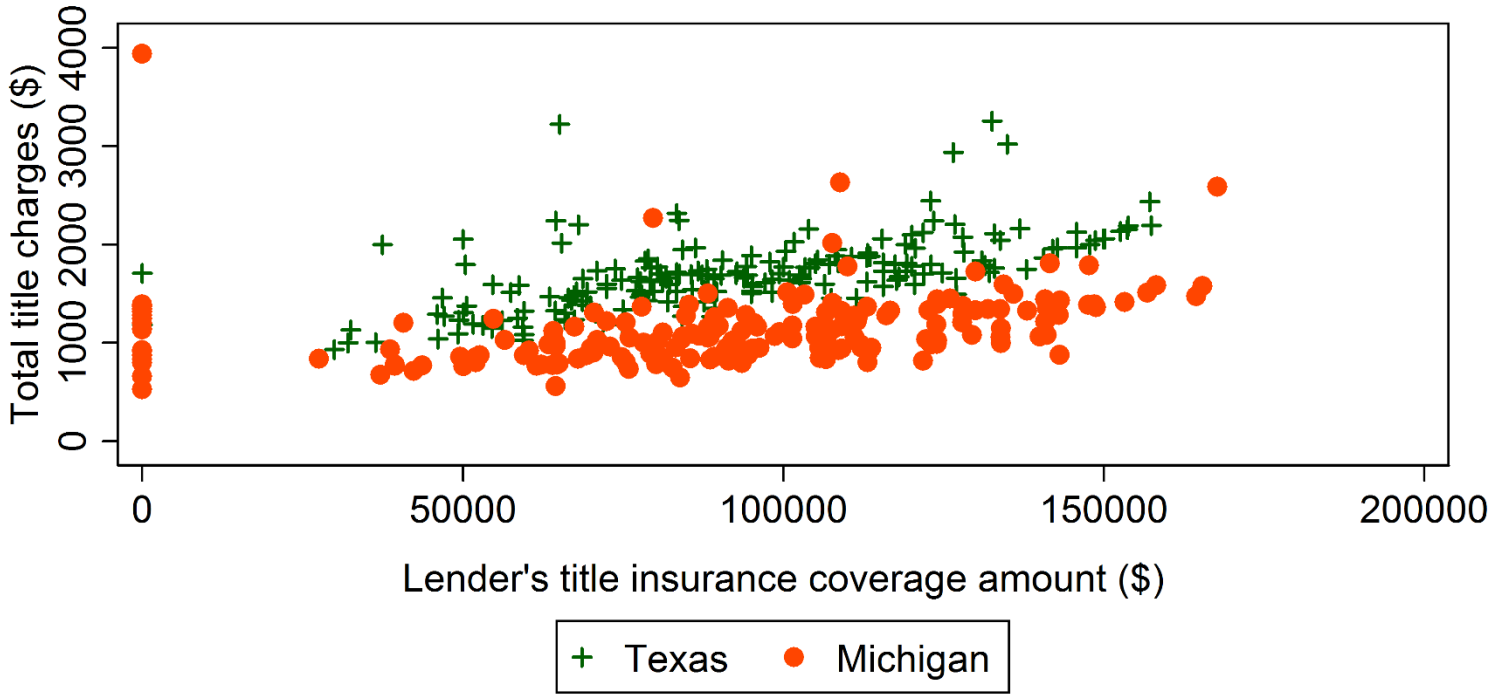
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.22 Comparison of Total Title Charges Between Texas and MA



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.23 Comparison of Total Title Charges Between Texas and Michigan



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.24 Comparison of Total Title Charges Between Texas and Minnesota

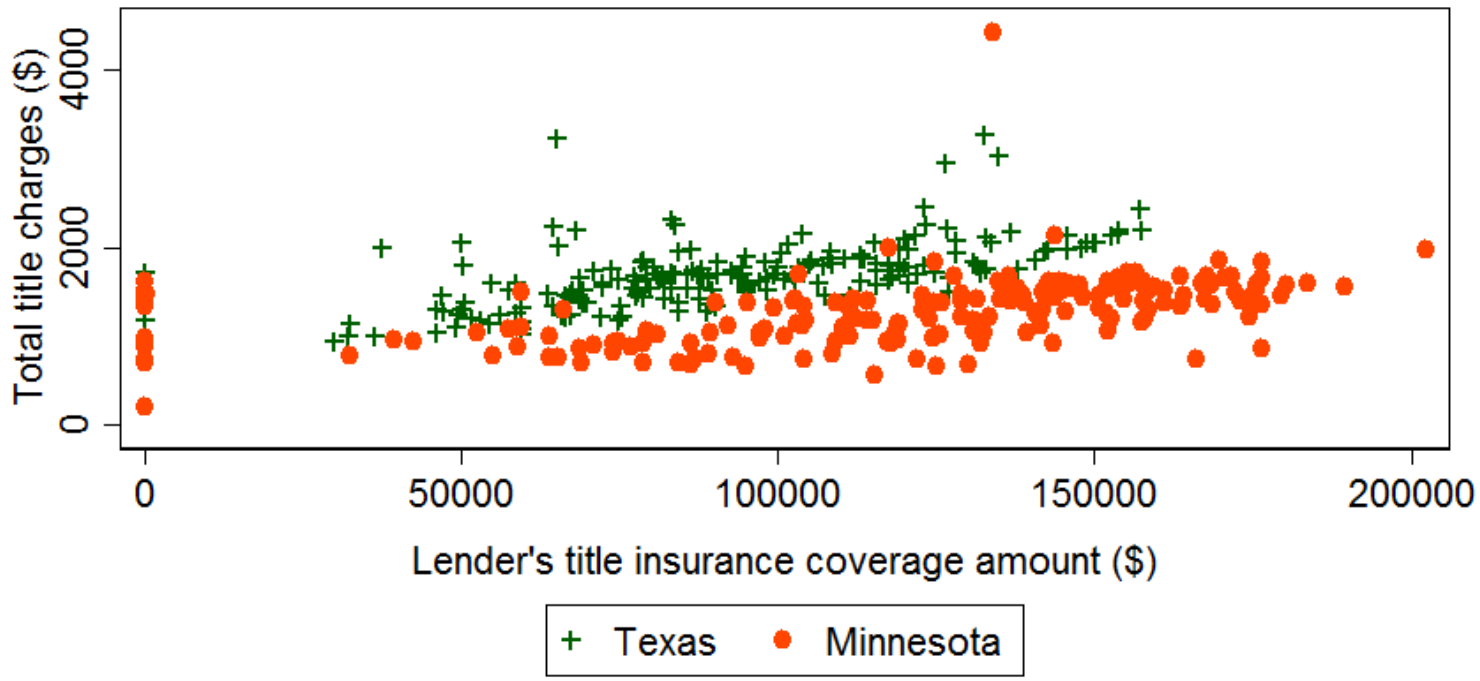


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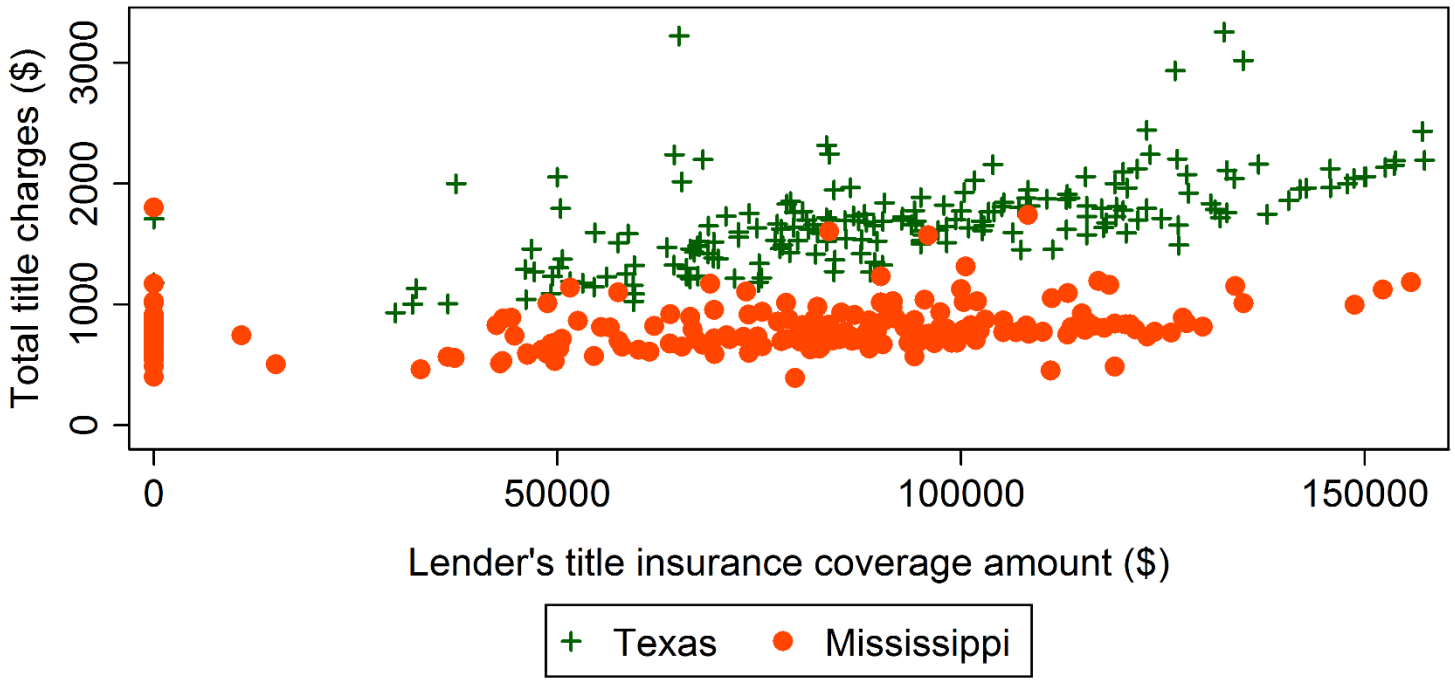
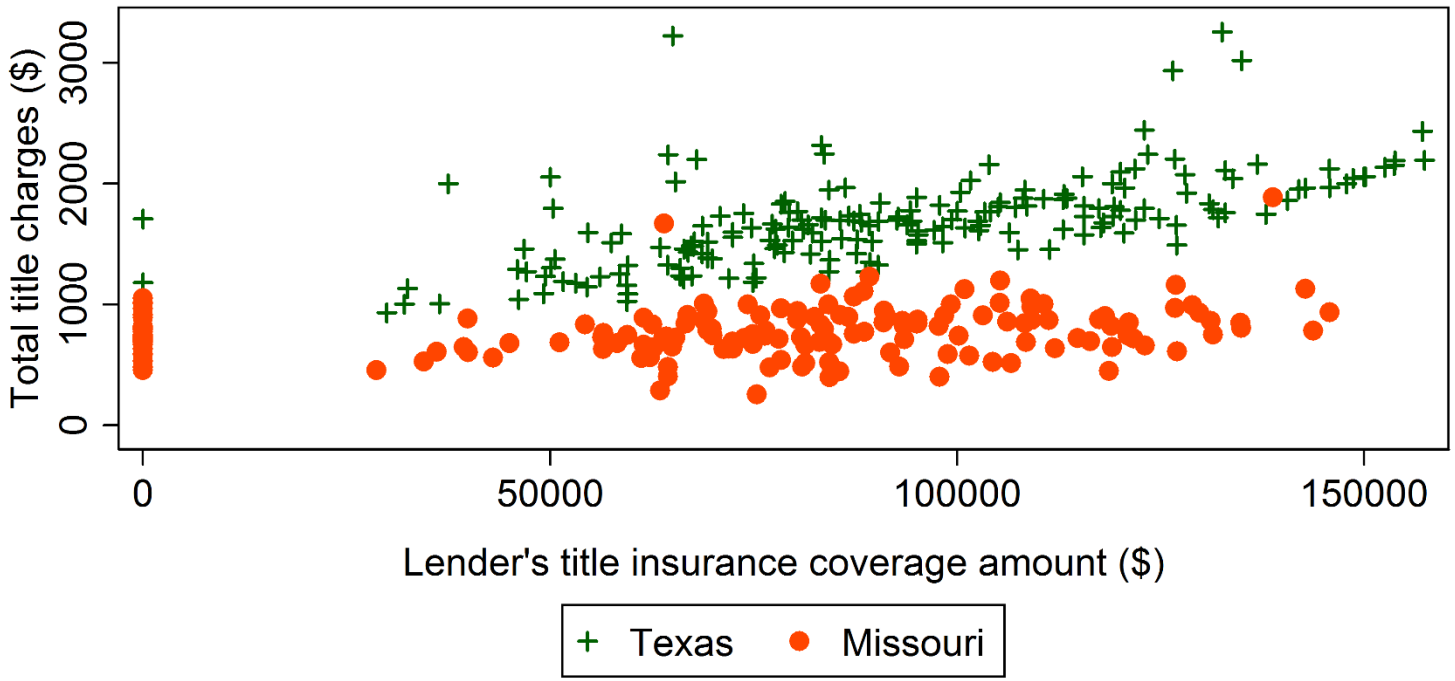
Figure 1.3.25 Comparison of Total Title Charges Between TX and MS



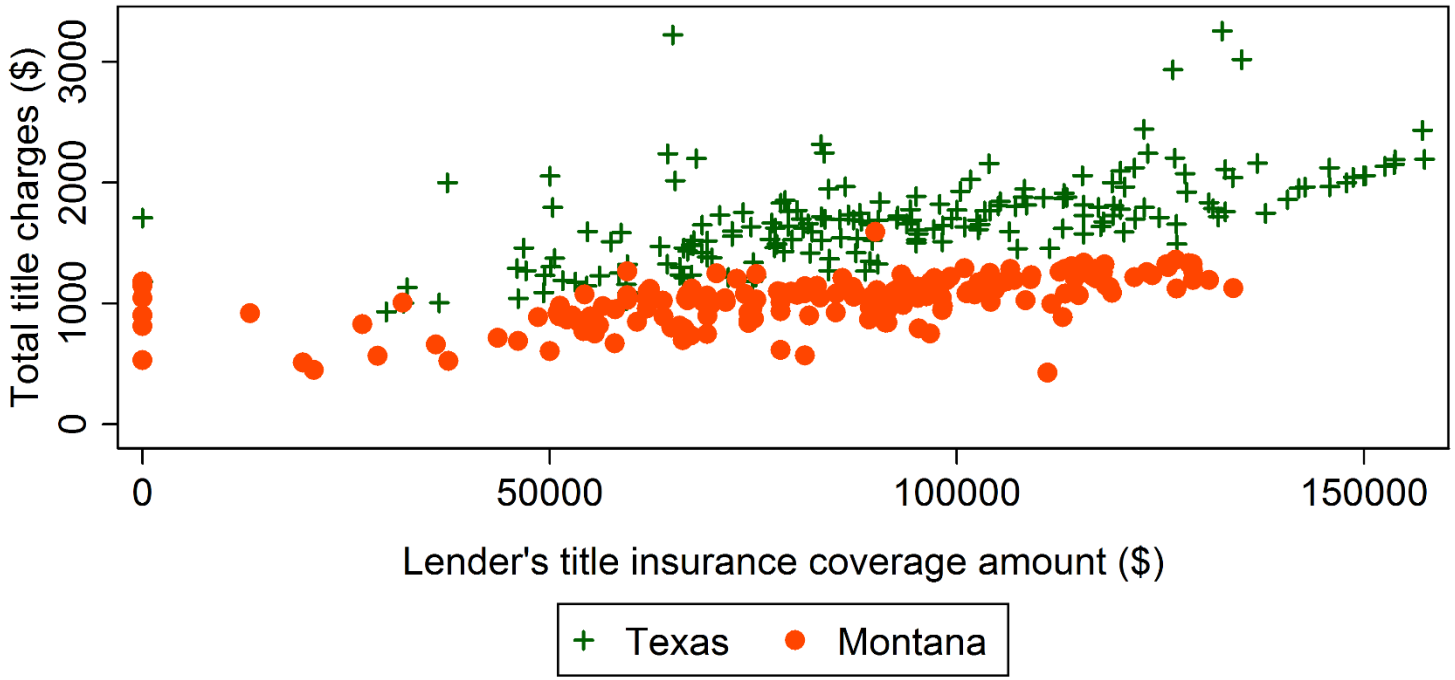
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.26 Comparison of Total Title Charges Between Texas and Missouri



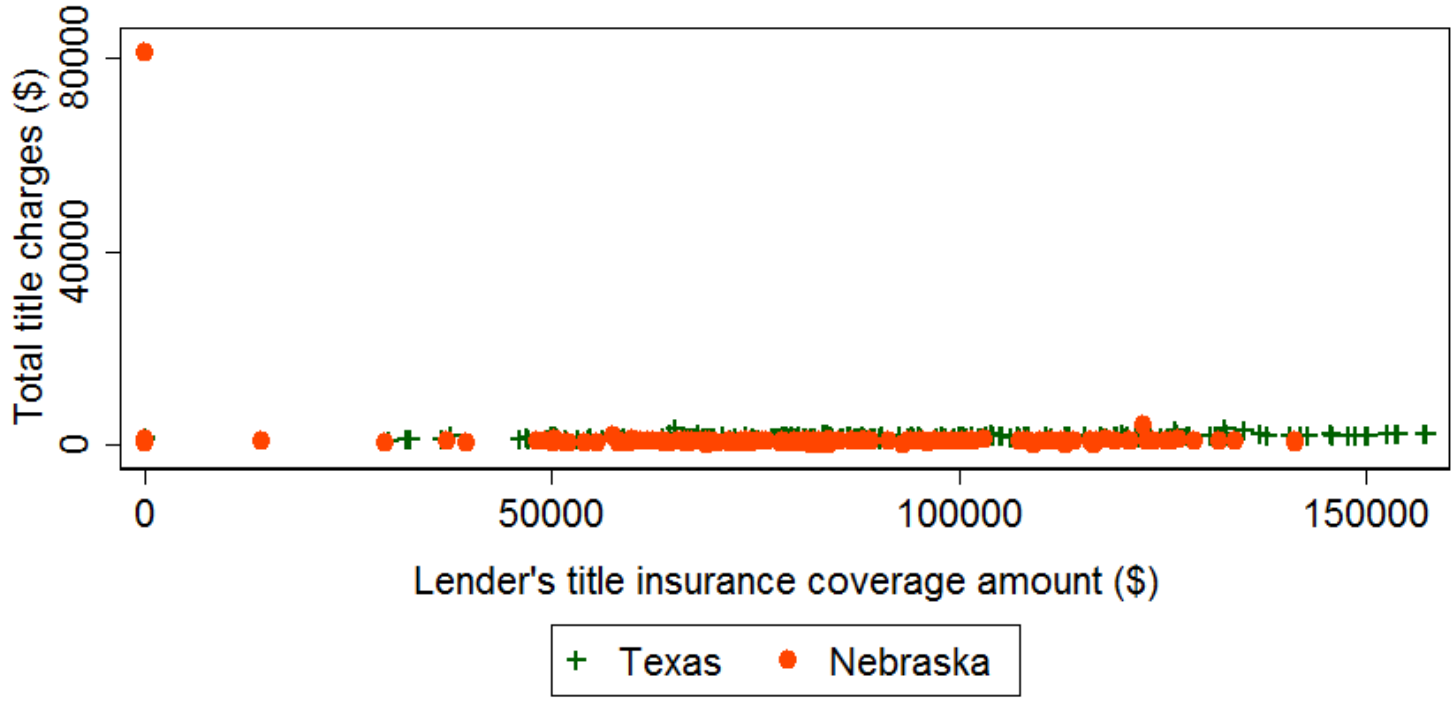
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.27 Comparison of Total Title Charges Between Texas and Montana



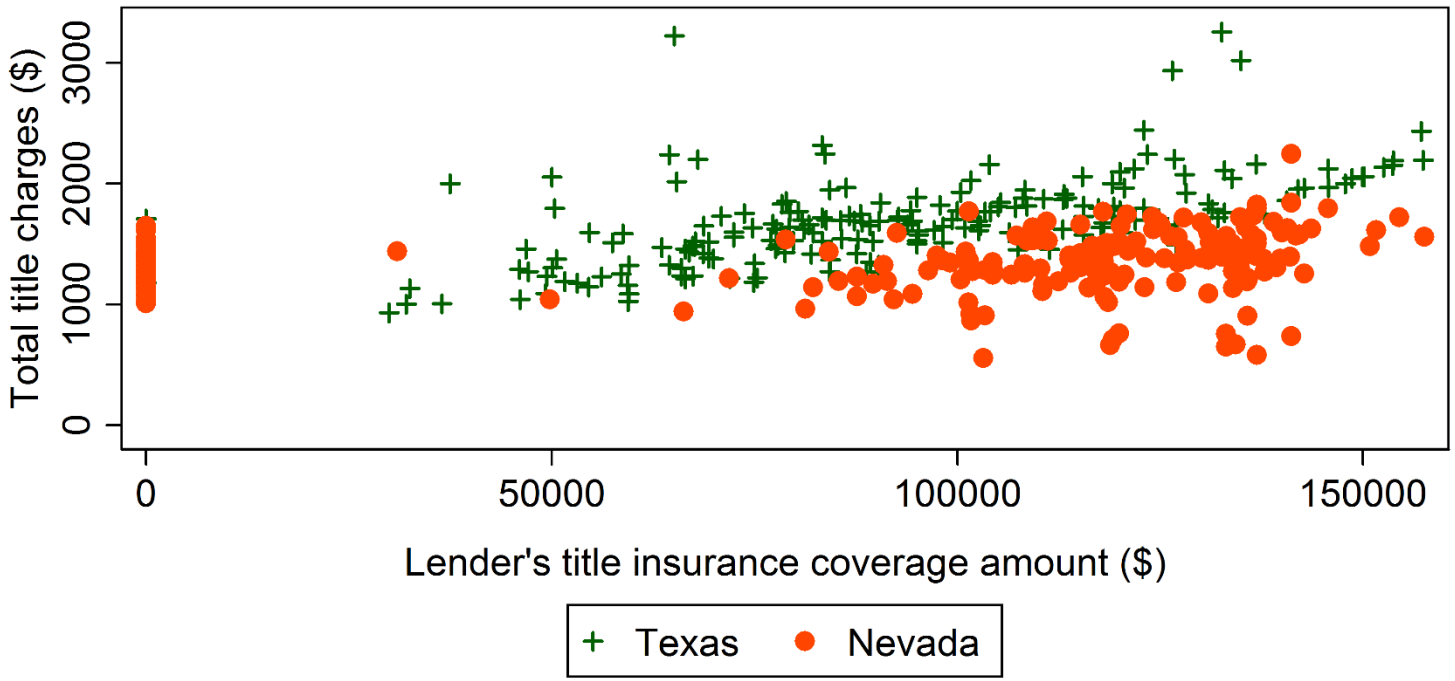
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.28 Comparison of Total Title Charges Between Texas and Nebraska



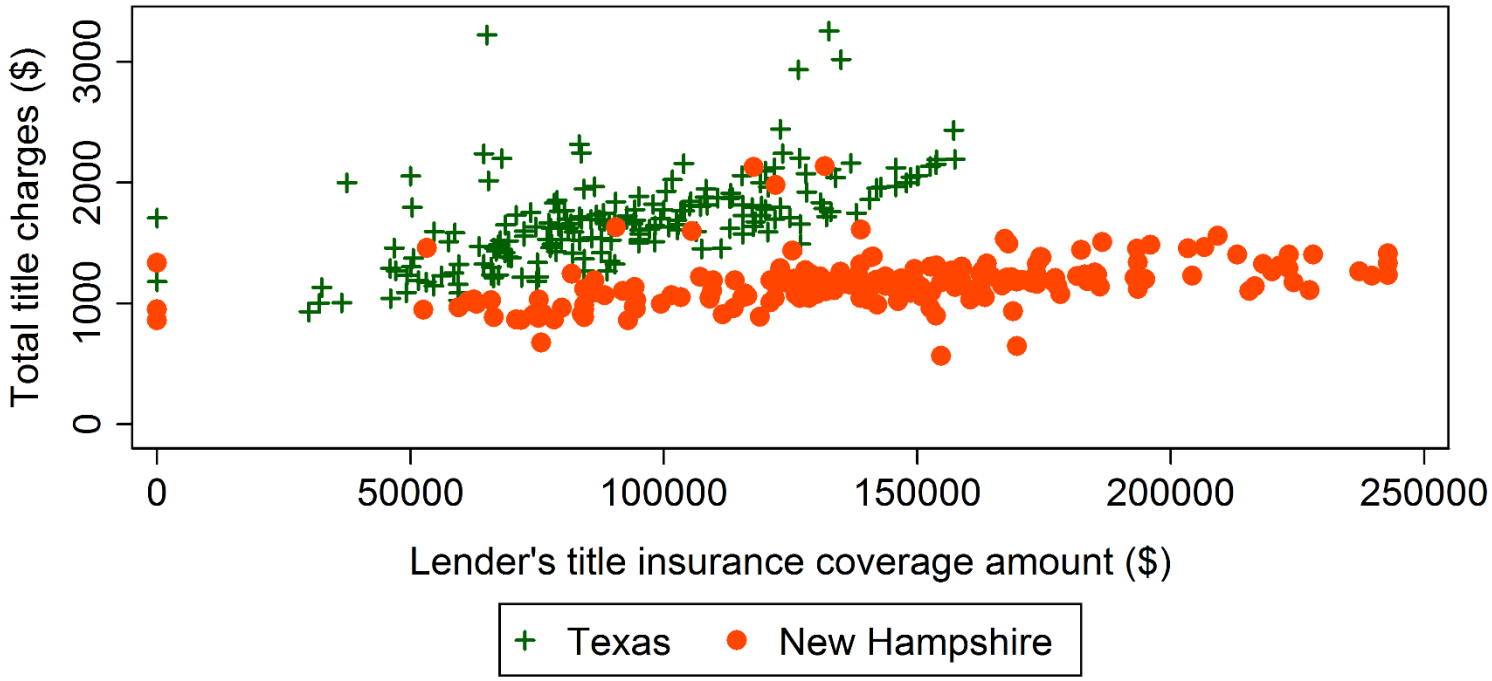
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.29 Comparison of Total Title Charges Between Texas and Nevada



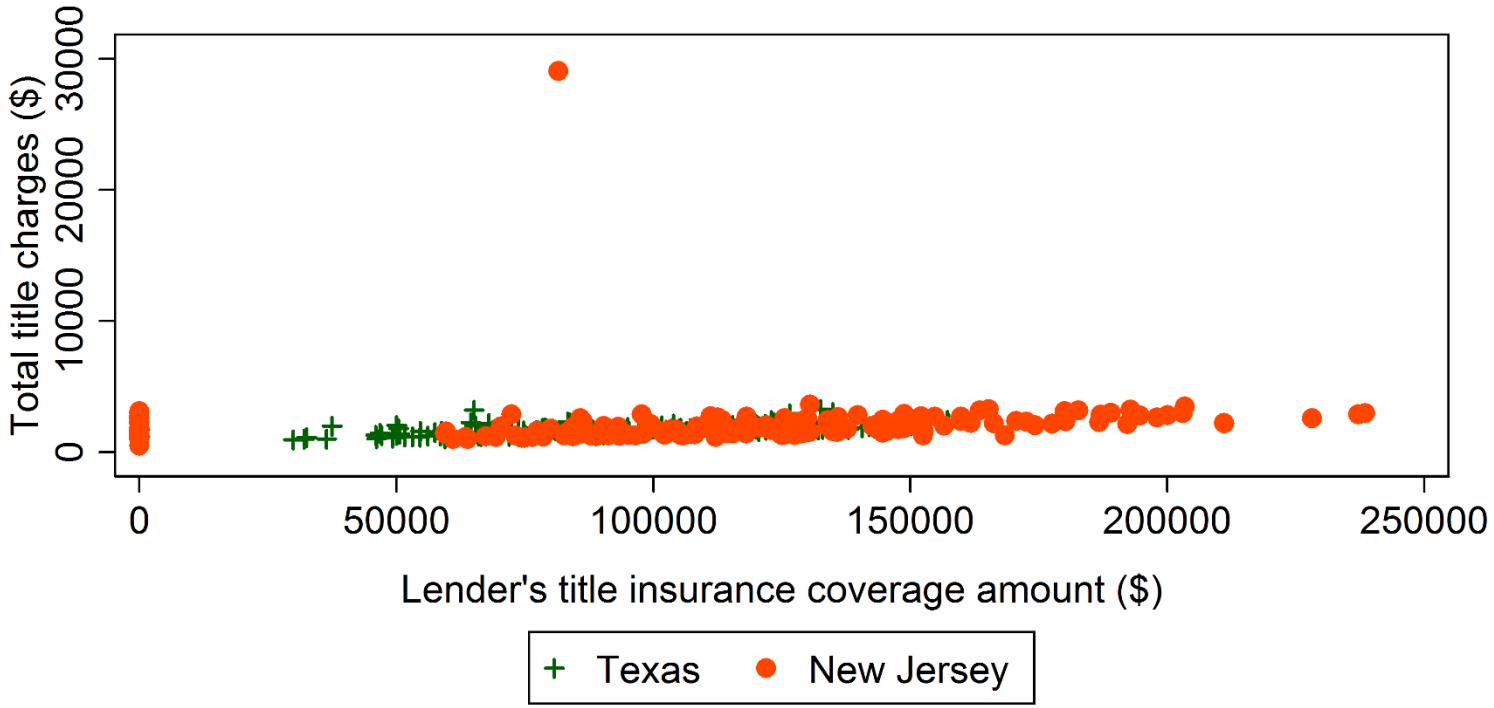
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.30 Comparison of Total Title Charges Between TX and NH



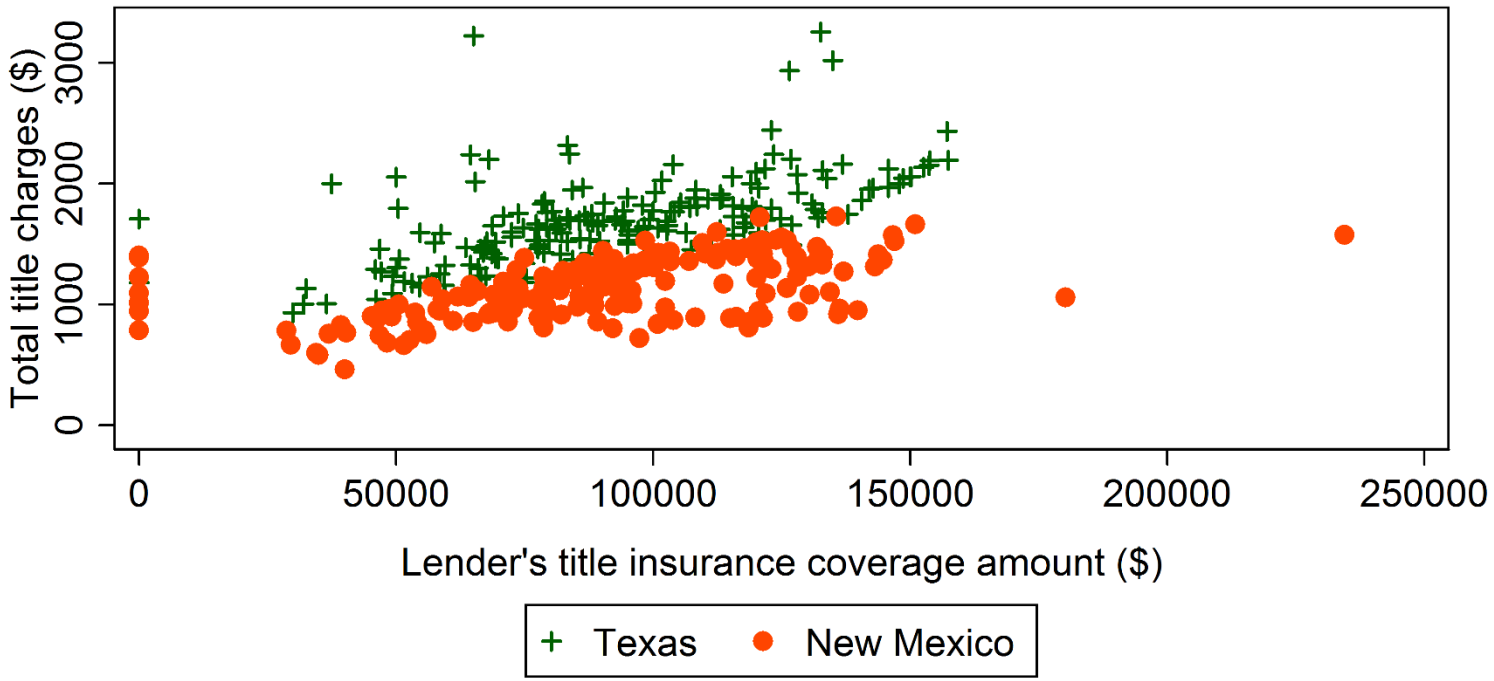
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.31 Comparison of Total Title Charges Between Texas and New Jerse



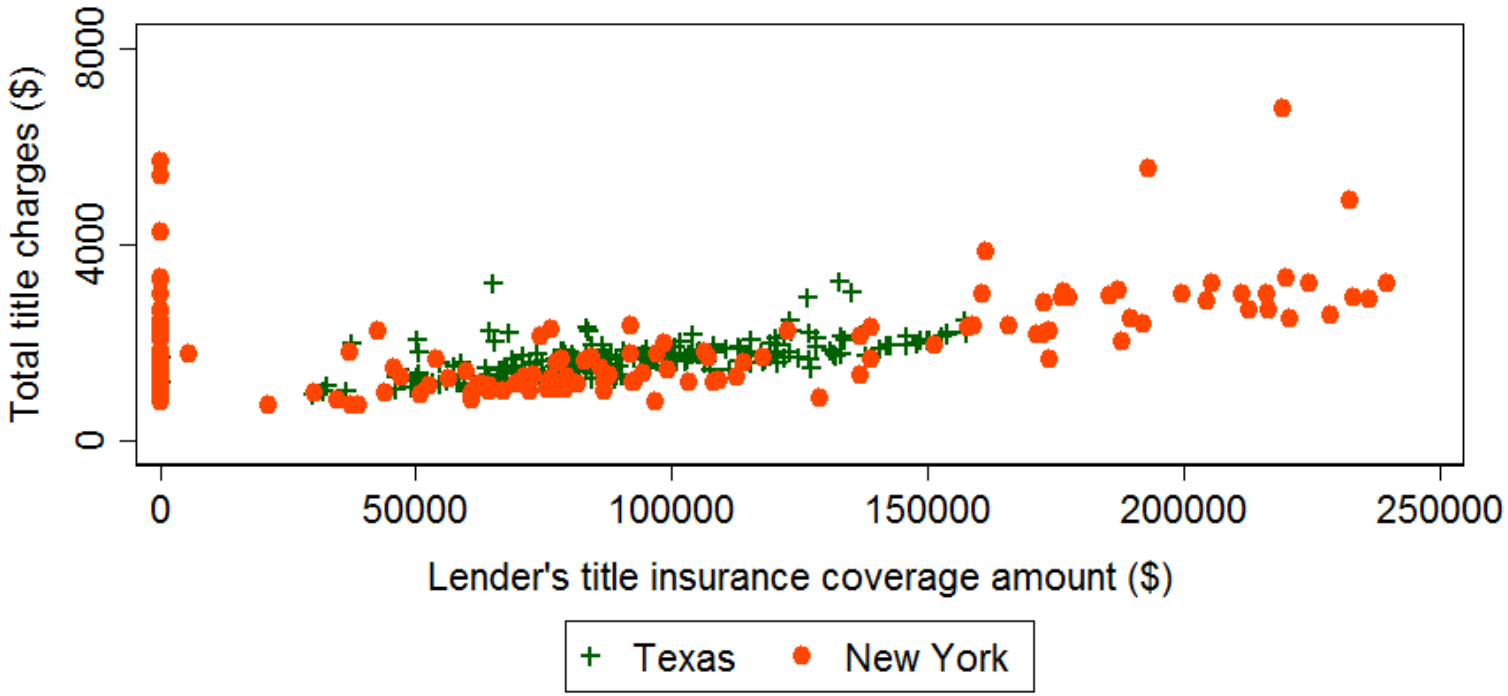
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.32 Comparison of Total Title Charges Between Texas and New Mexic



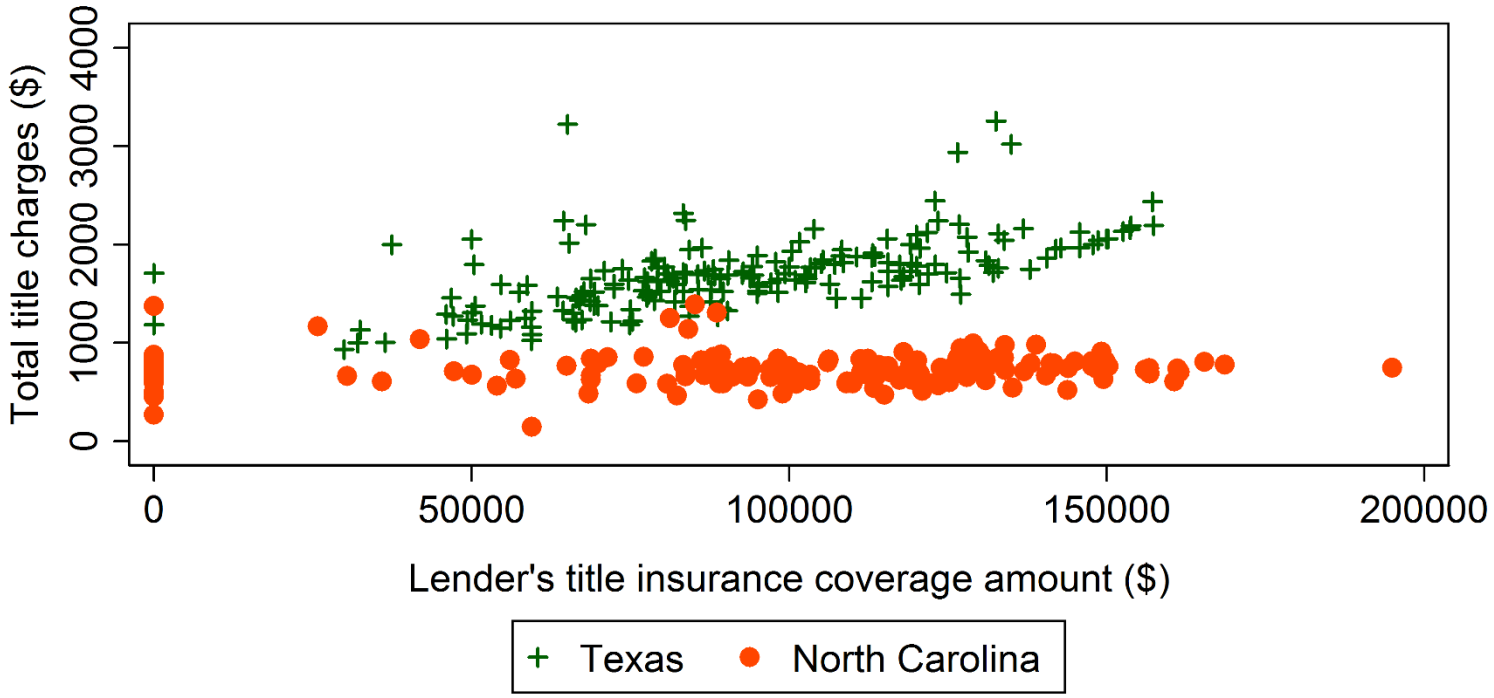
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.33 Comparison of Total Title Charges Between Texas and New York



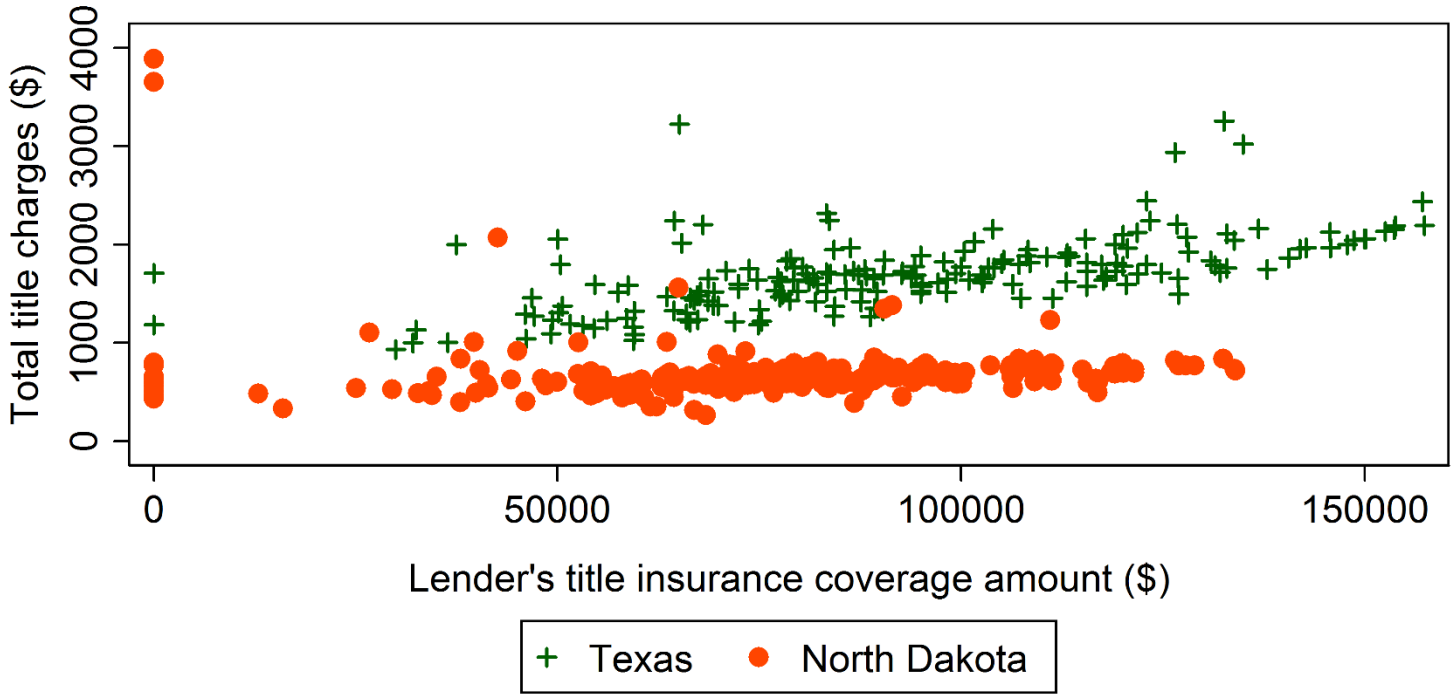
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.34 Comparison of Total Title Charges Between TX and NC



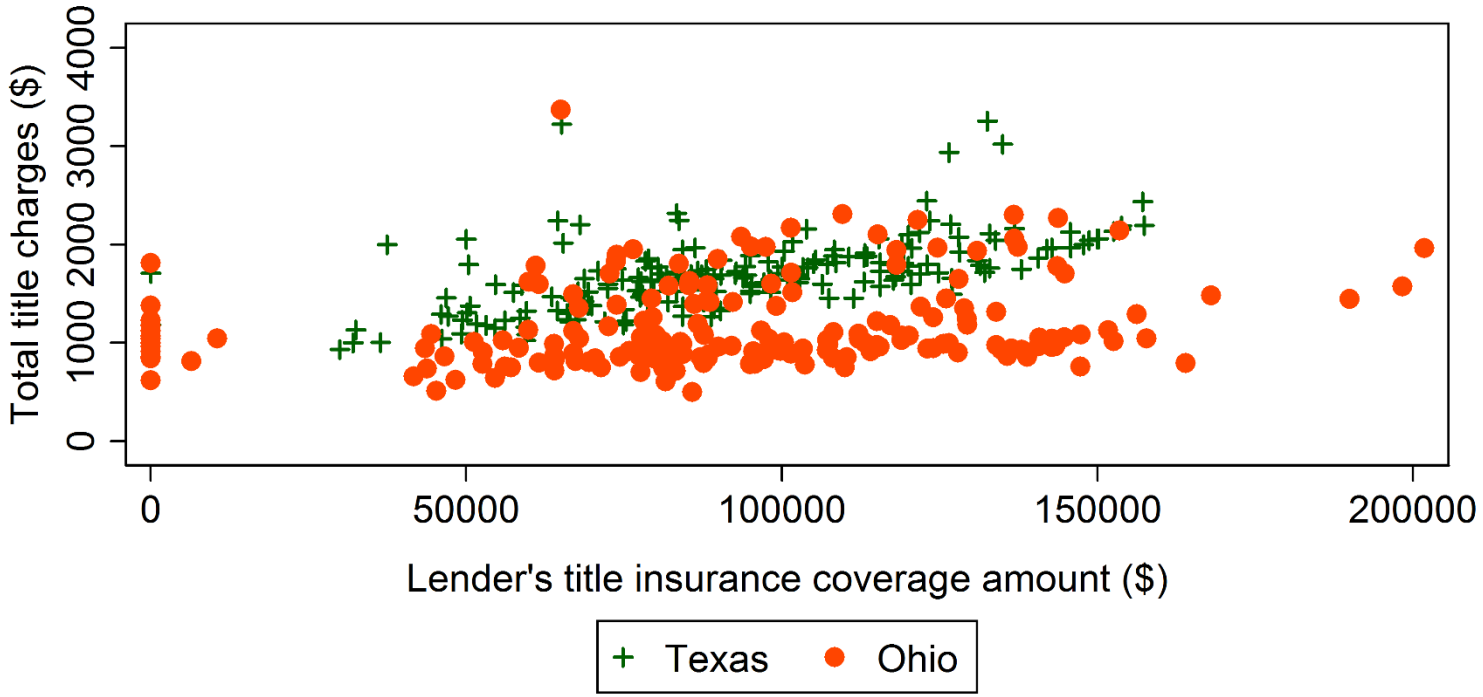
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.35 Comparison of Total Title Charges Between TX and ND



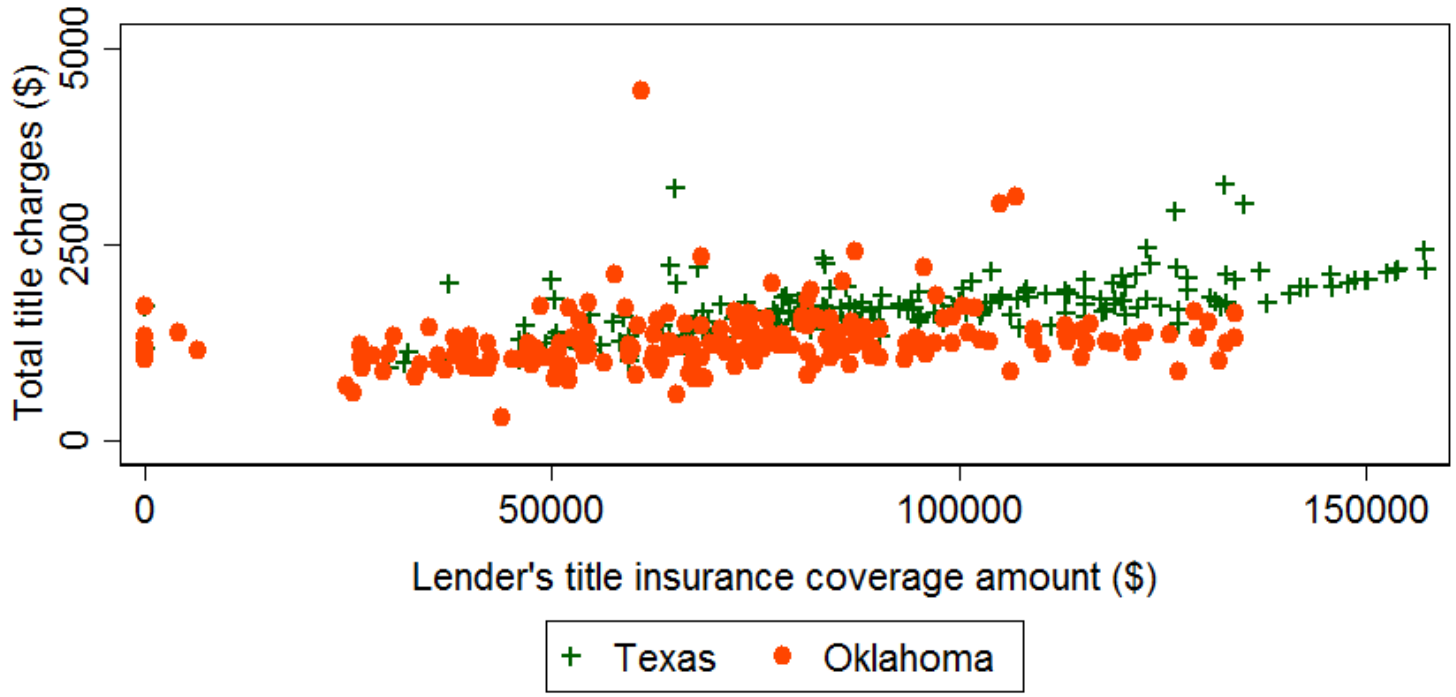
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.36 Comparison of Total Title Charges Between Texas and Ohio



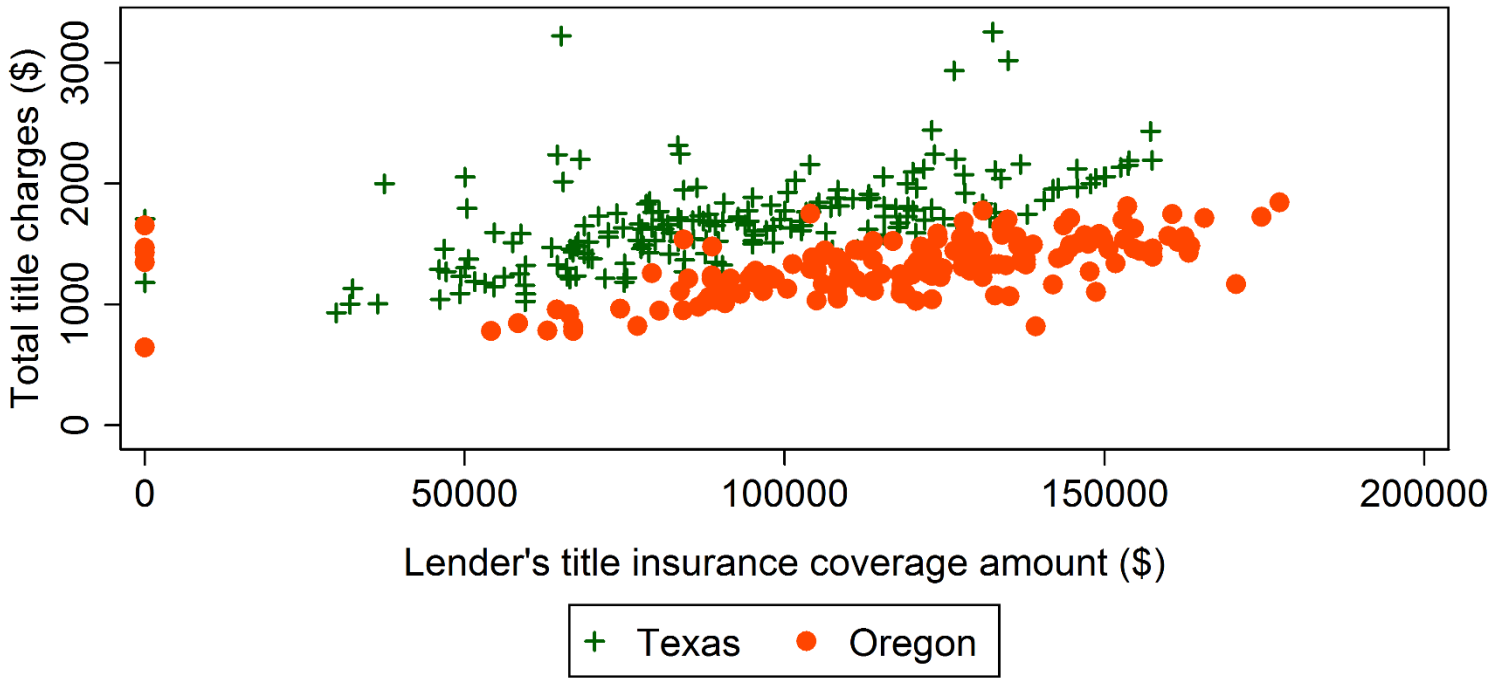
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.37 Comparison of Total Title Charges Between Texas and Oklahoma



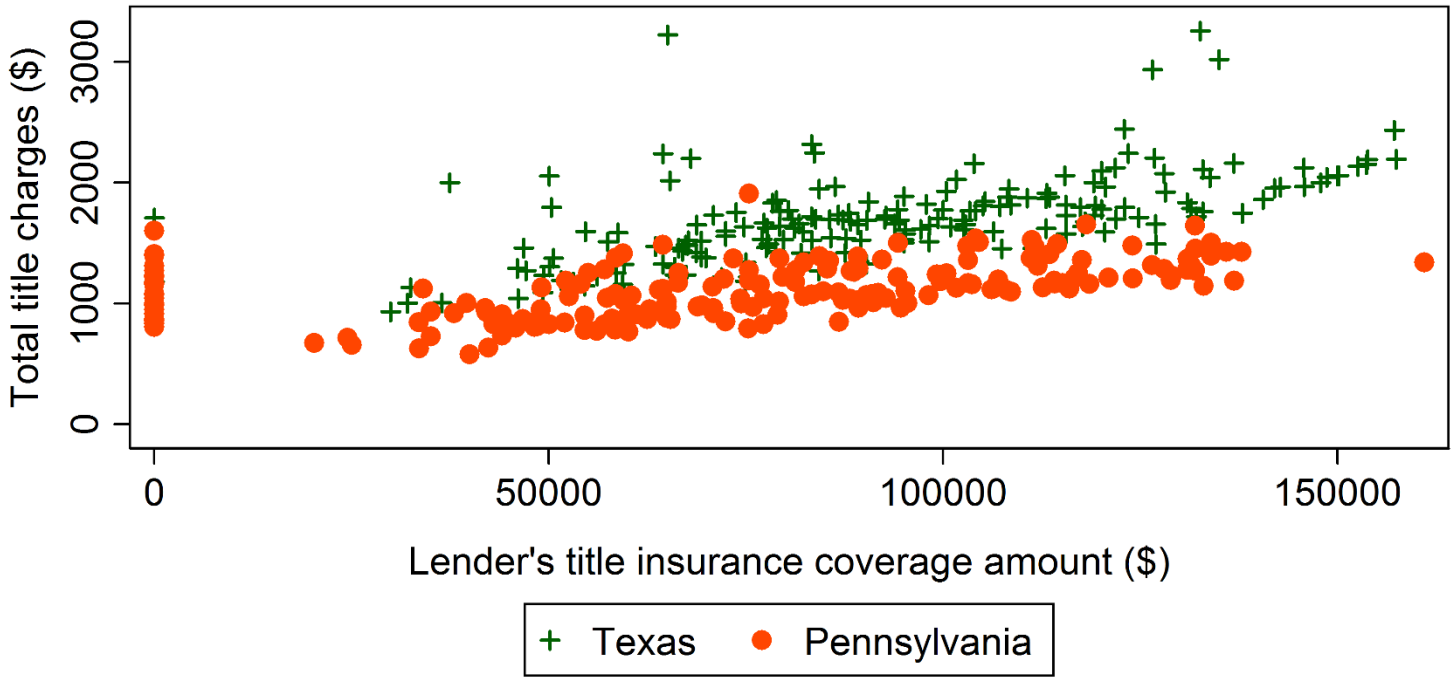
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.38 Comparison of Total Title Charges Between Texas and Oregon



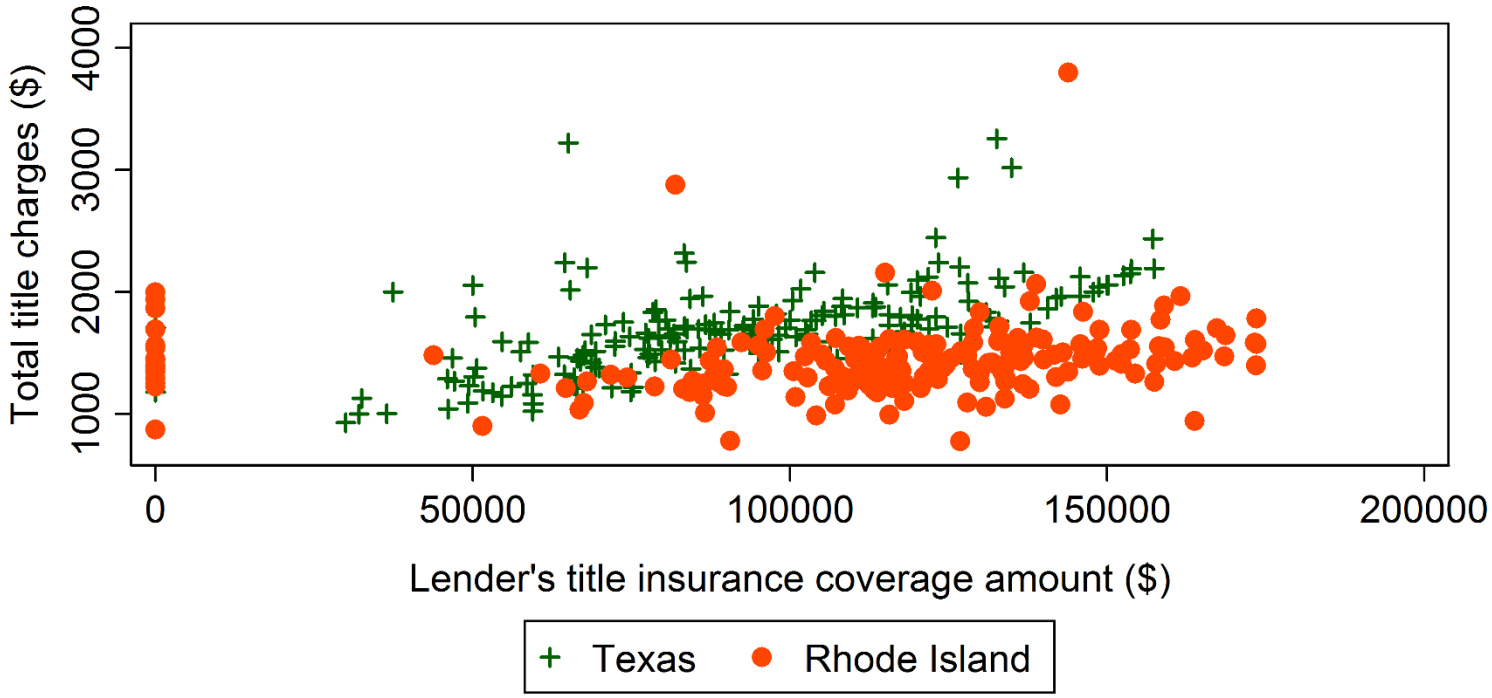
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.39 Comparison of Total Title Charges Between TX and PA



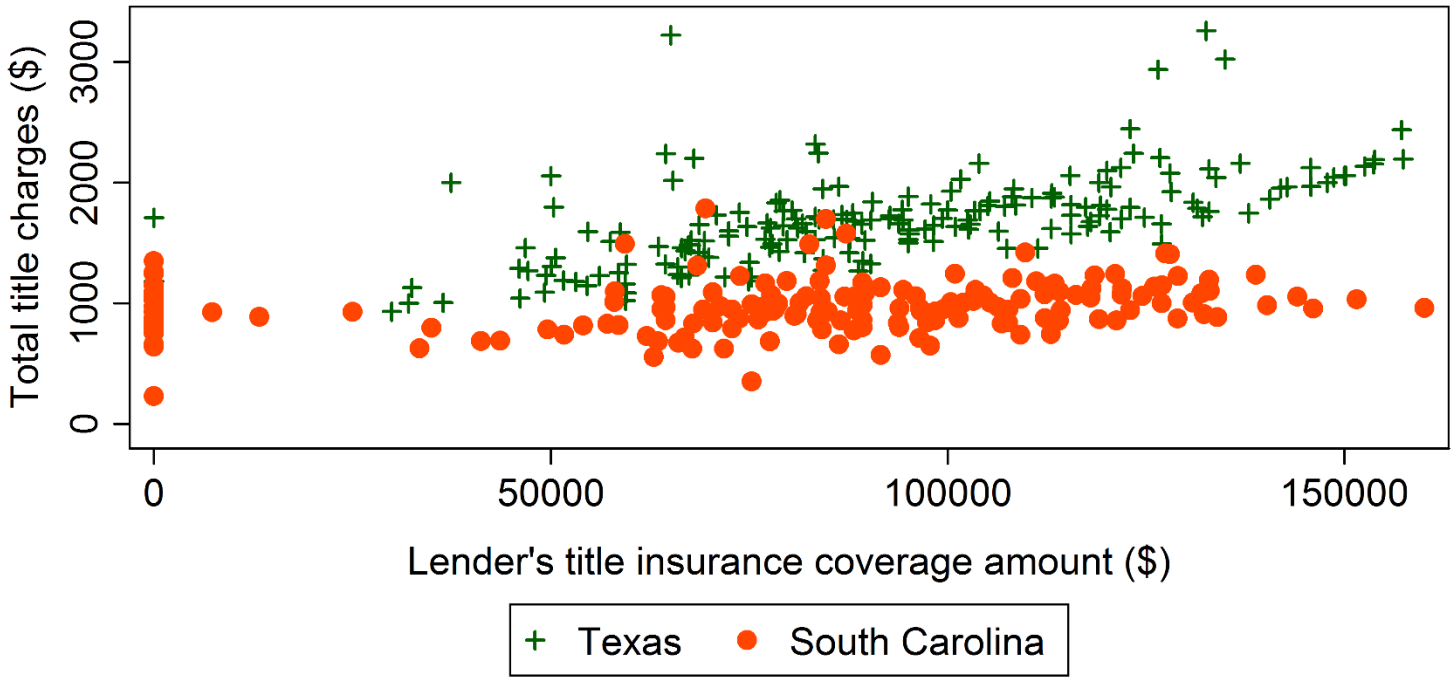
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.40 Comparison of Total Title Charges Between TX and RI



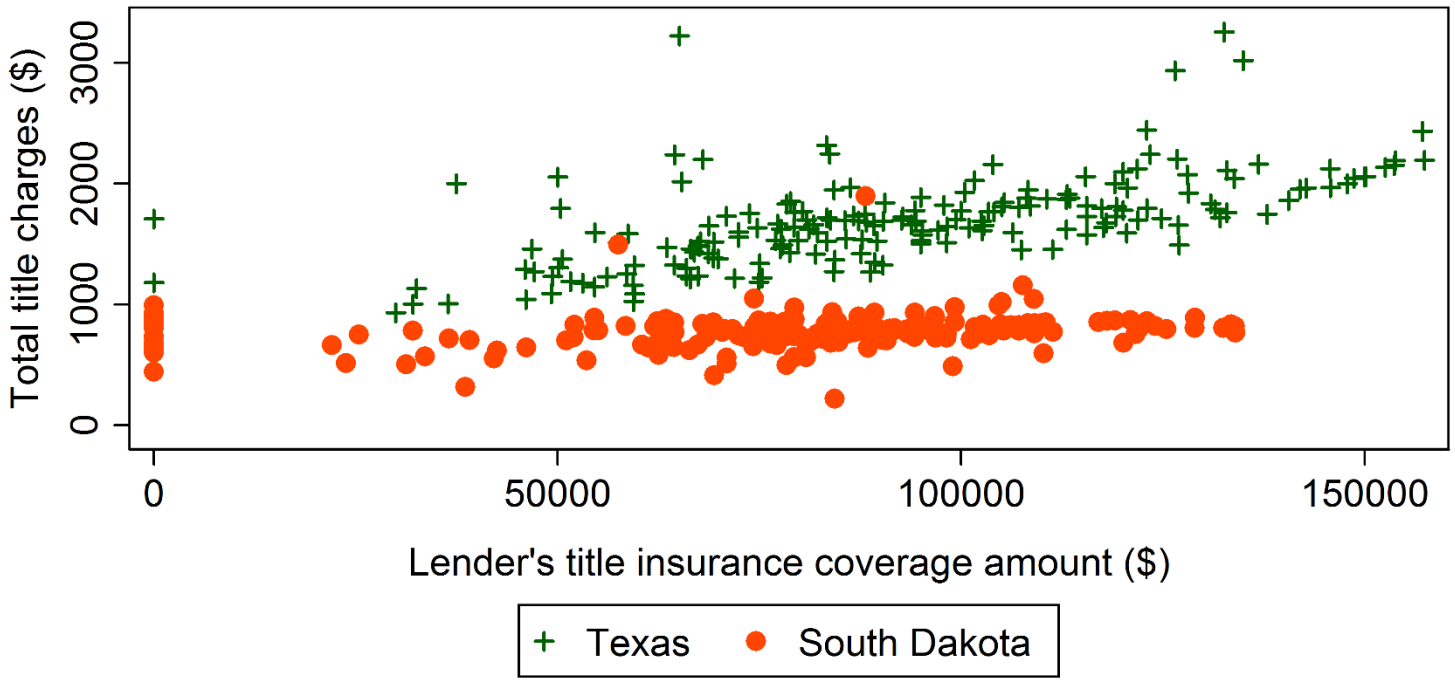
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.41 Comparison of Total Title Charges Between TX and SC



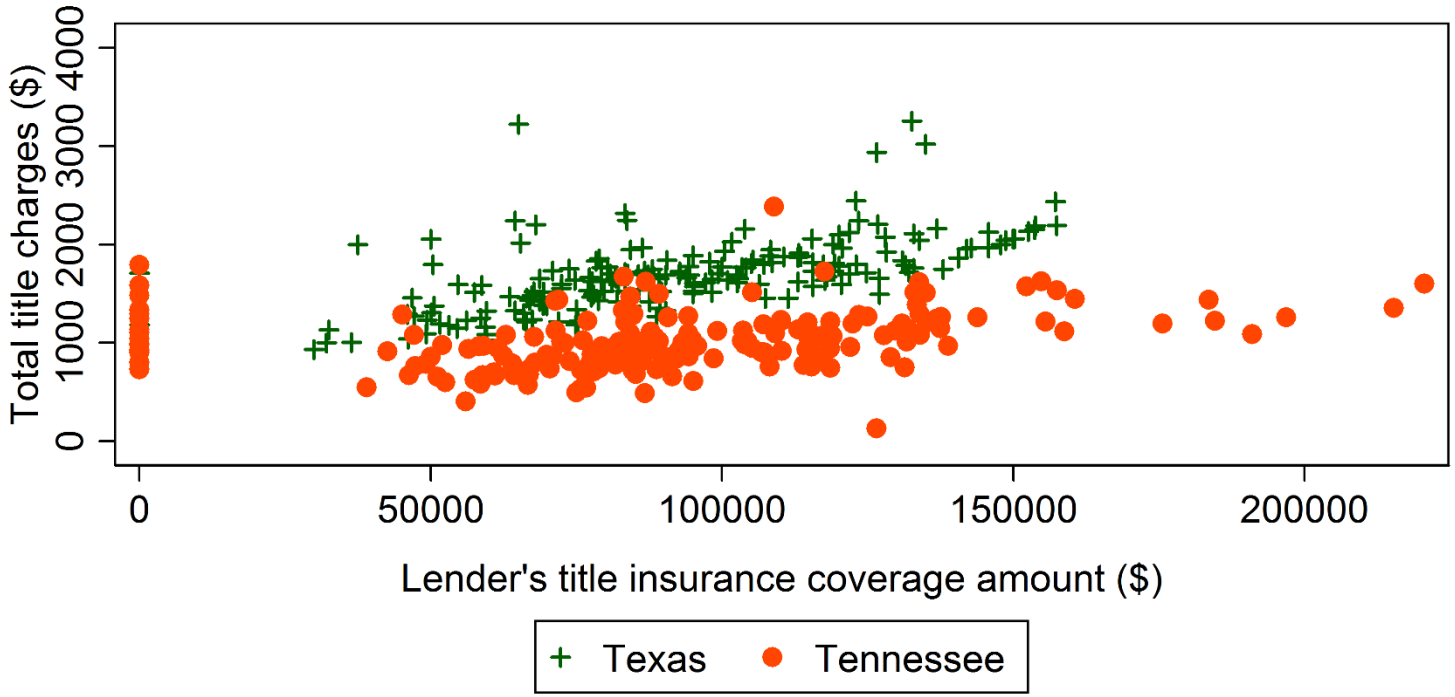
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.42 Comparison of Total Title Charges Between TX and SD



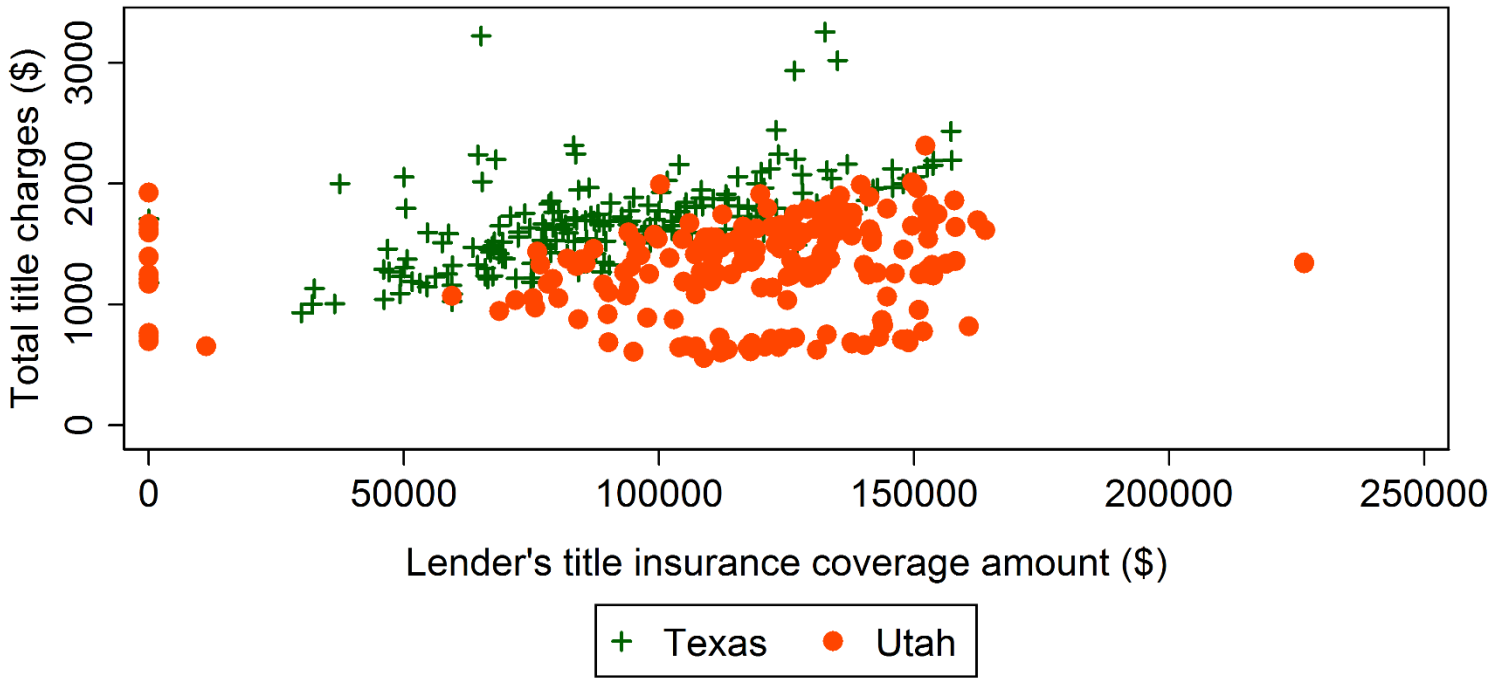
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.43 Comparison of Total Title Charges Between Texas and Tennessee



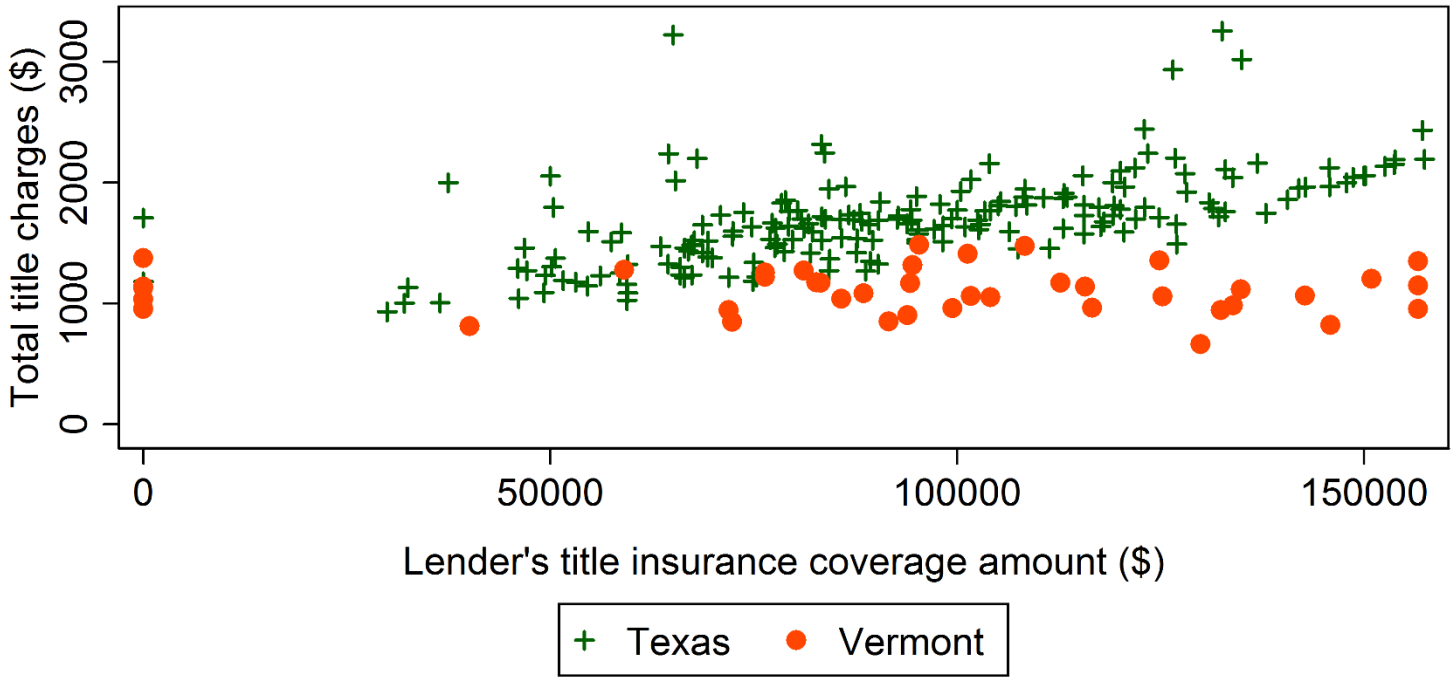
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.44 Comparison of Total Title Charges Between Texas and Utah



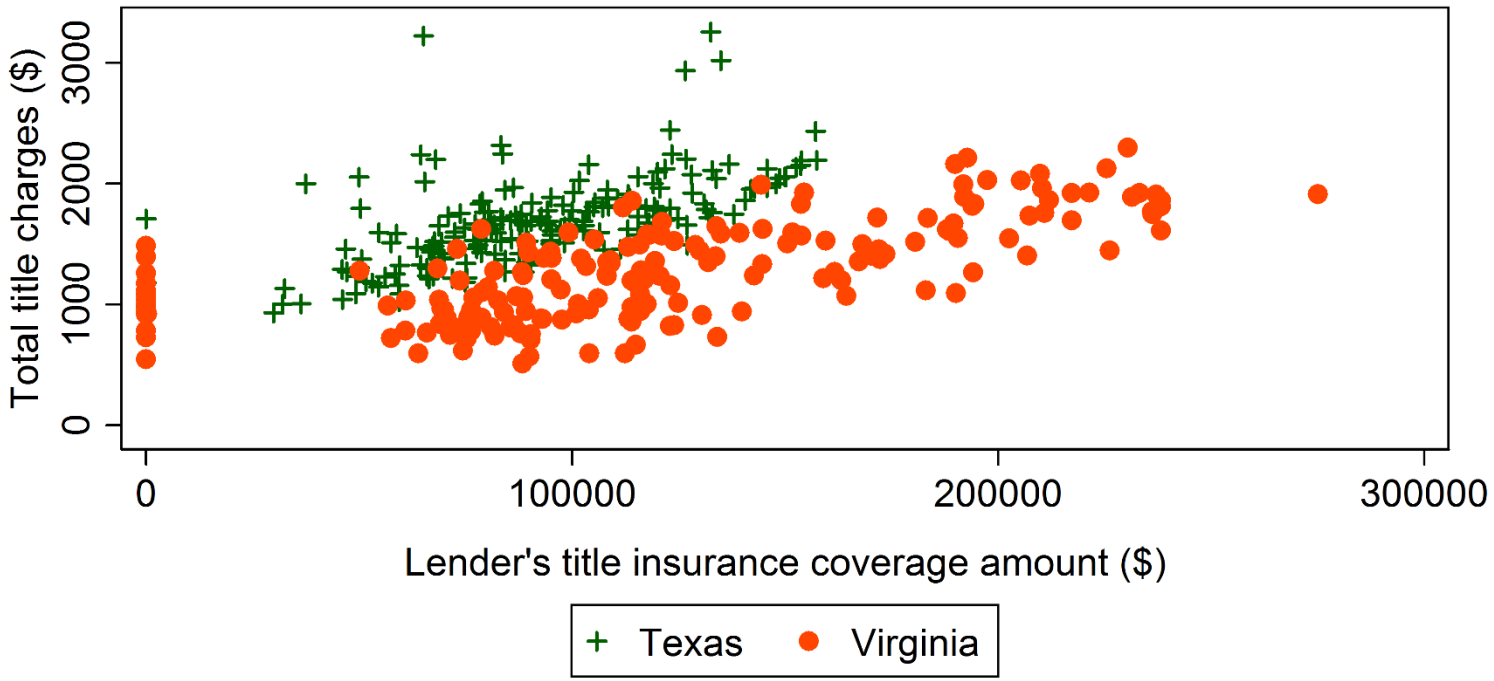
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.45 Comparison of Total Title Charges Between Texas and Vermont



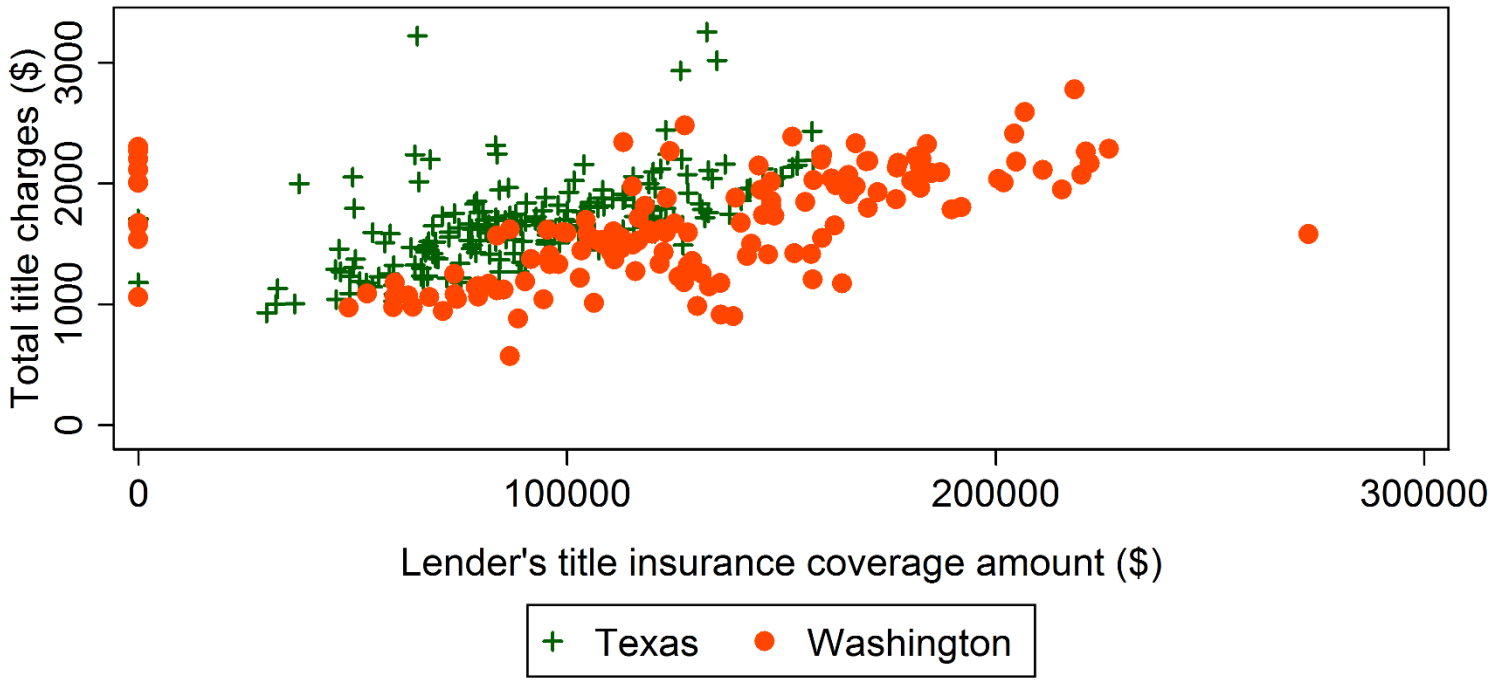
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.46 Comparison of Total Title Charges Between Texas and Virginia



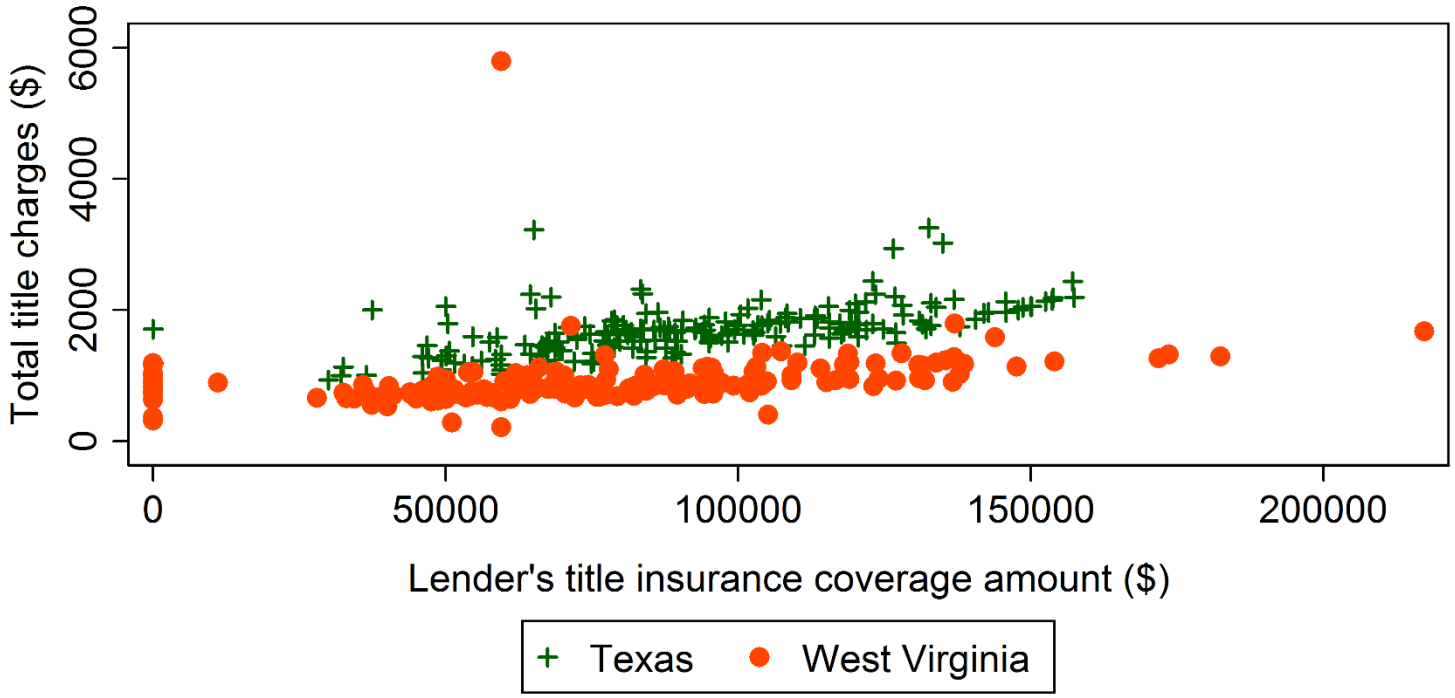
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.47 Comparison of Total Title Charges Between Texas and Washingtor



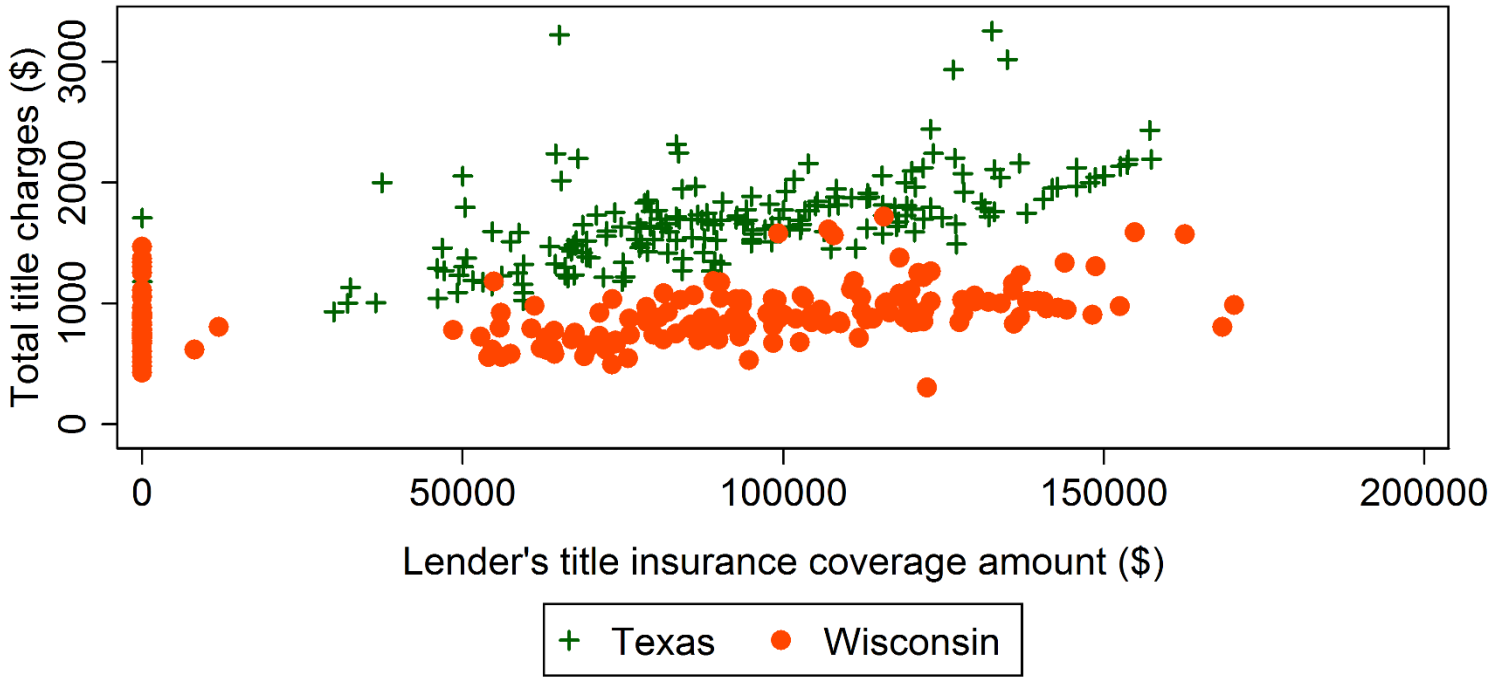
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.48 Comparison of Total Title Charges Between TX and WV



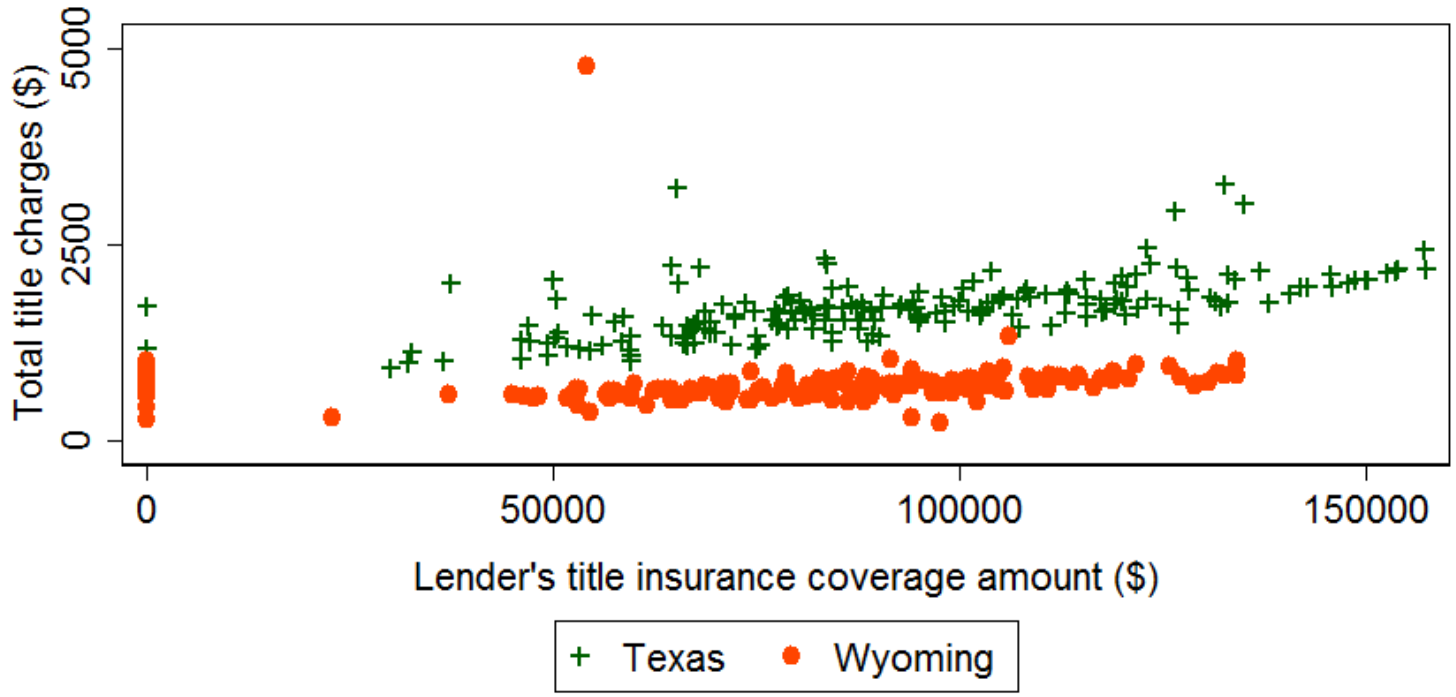
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.49 Comparison of Total Title Charges Between Texas and Wisconsir



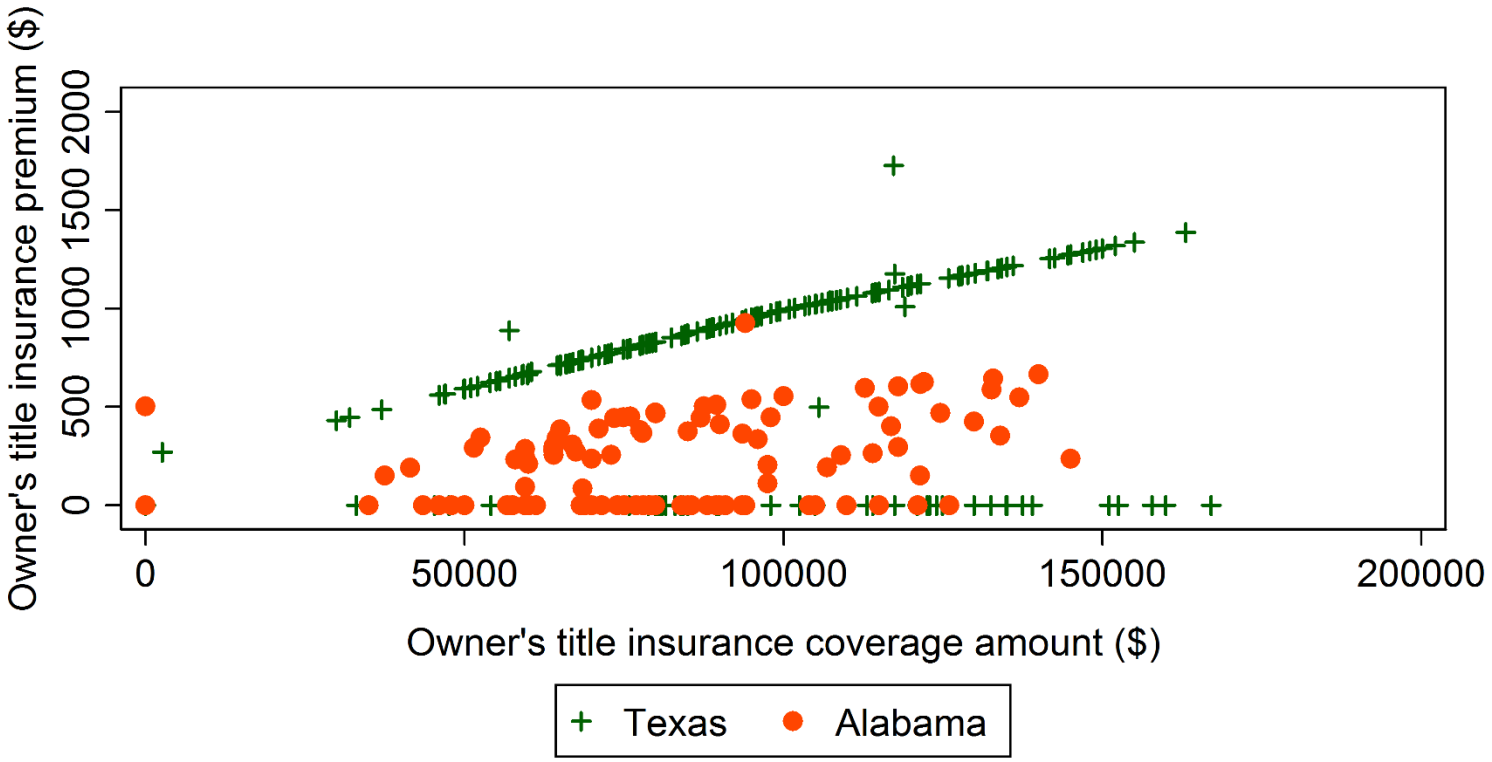
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.3.50 Comparison of Total Title Charges Between Texas and Wyoming



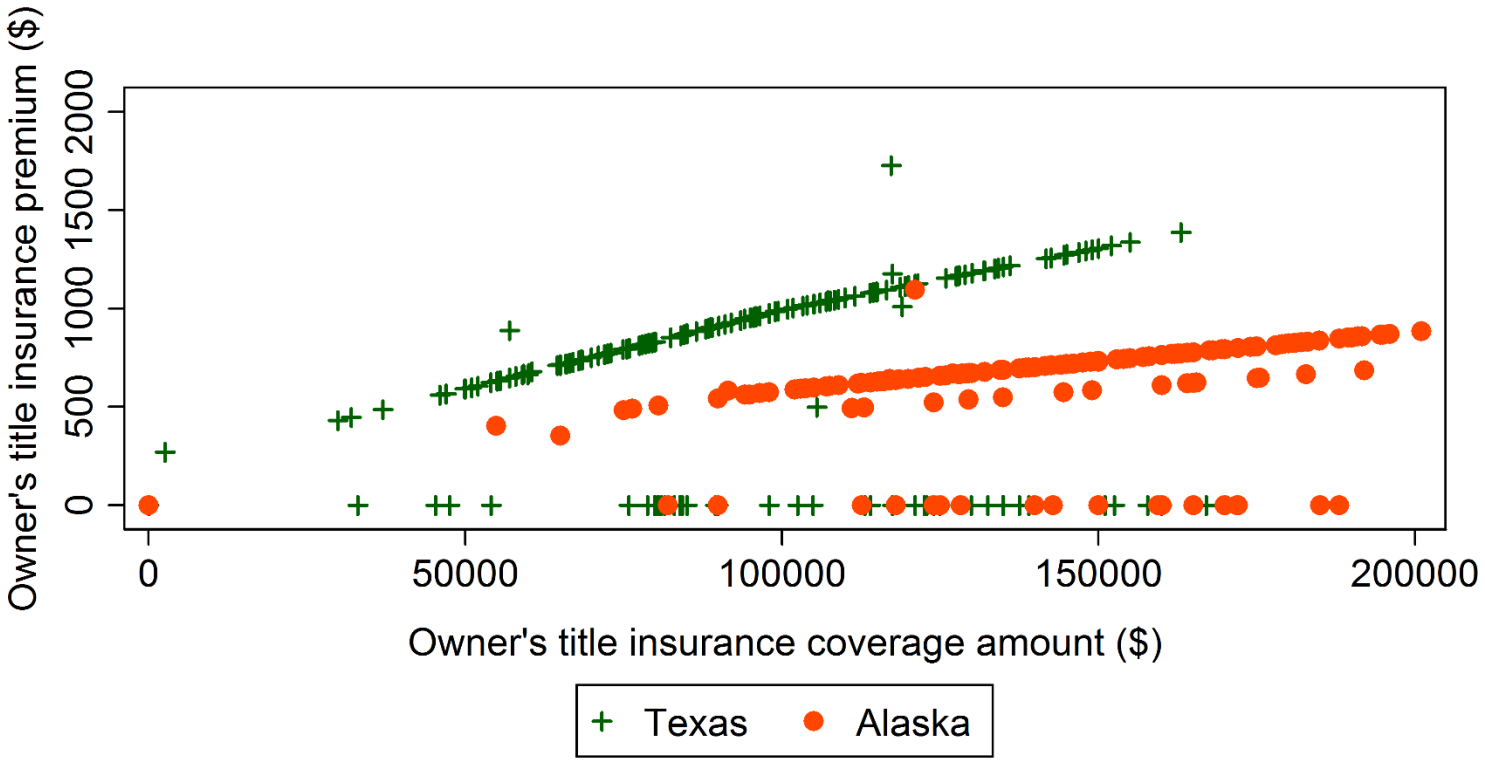
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.1 Comparison of Owner's Premium Between Texas and Alabama



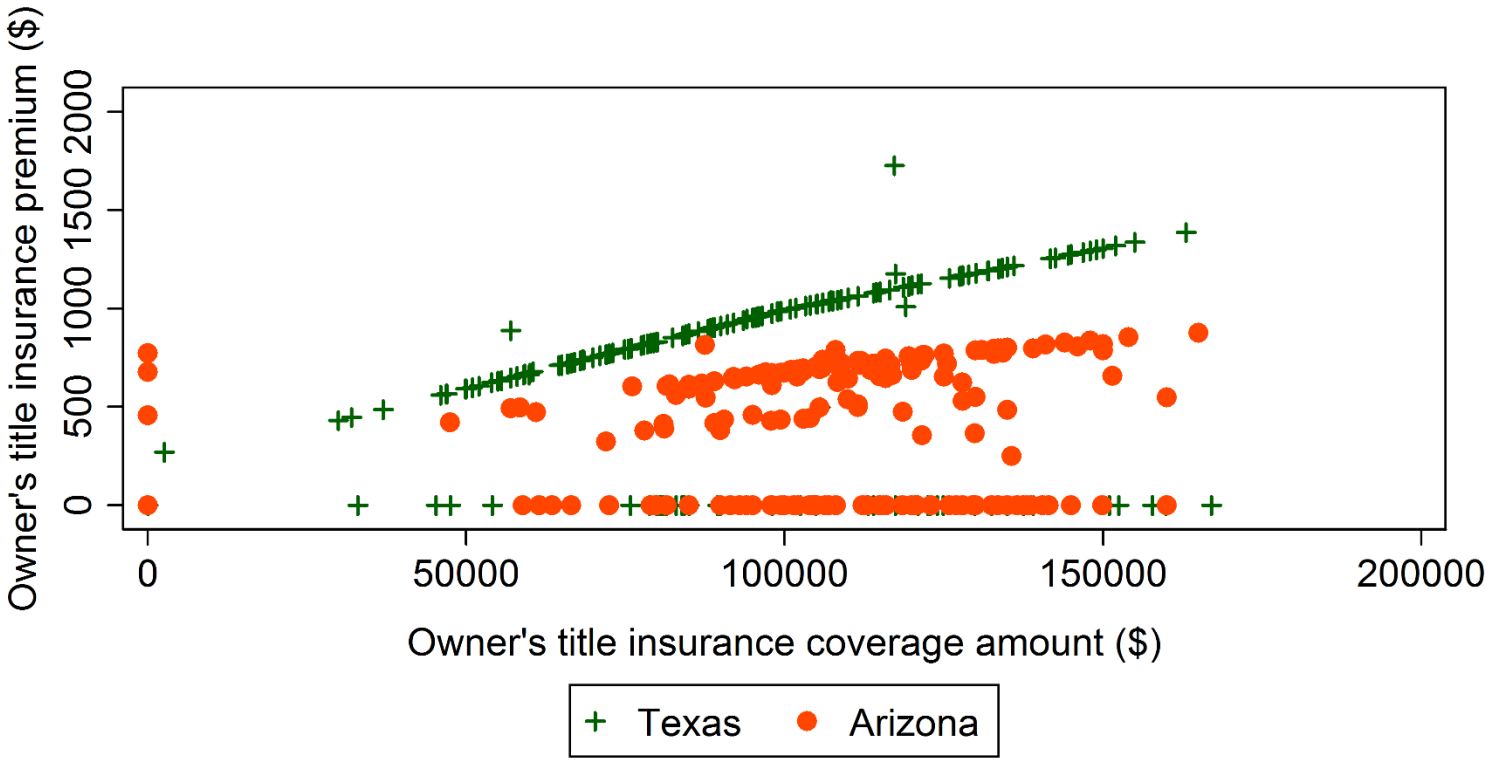
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.2 Comparison of Owner's Premium Between Texas and Alaska



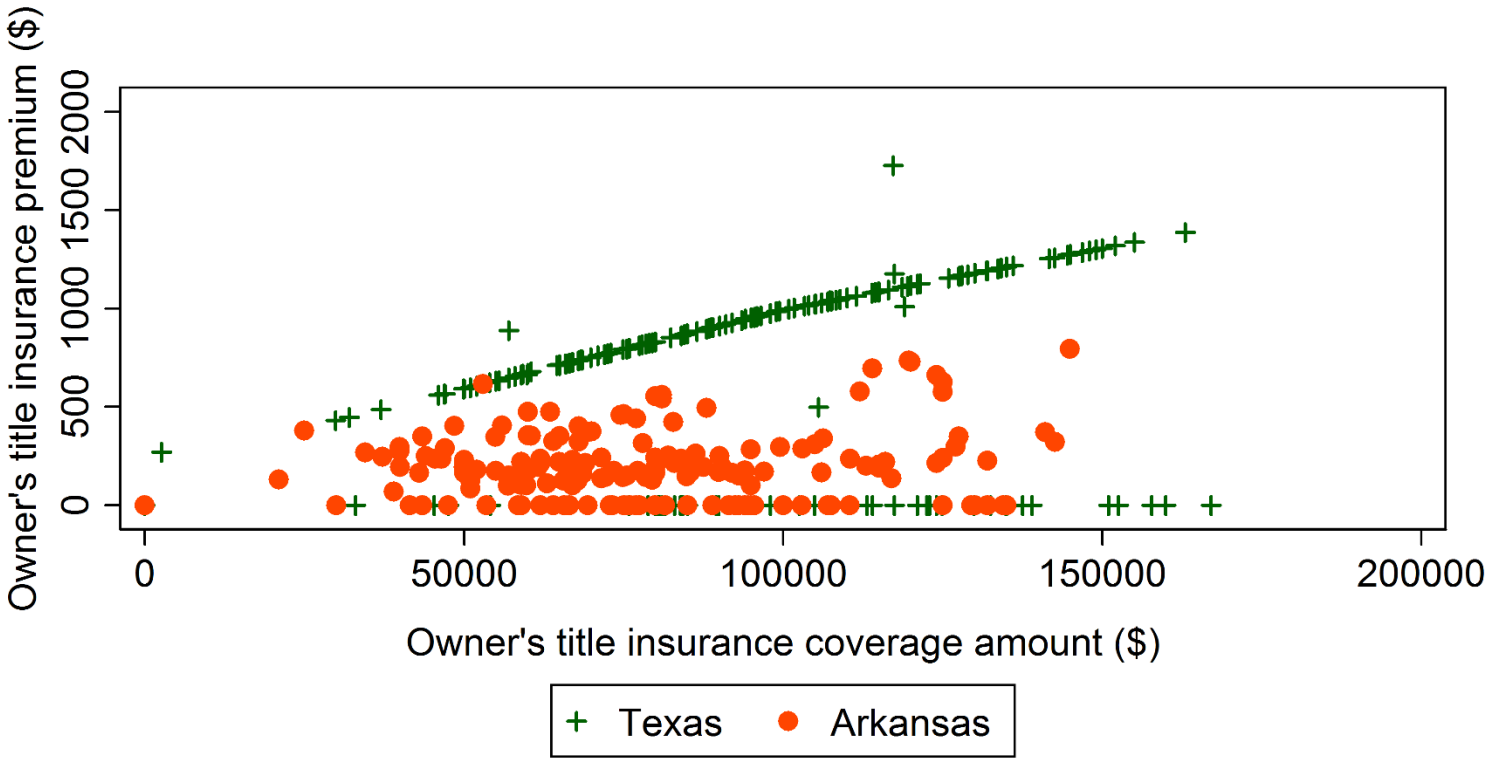
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.3 Comparison of Owner's Premium Between Texas and Arizona



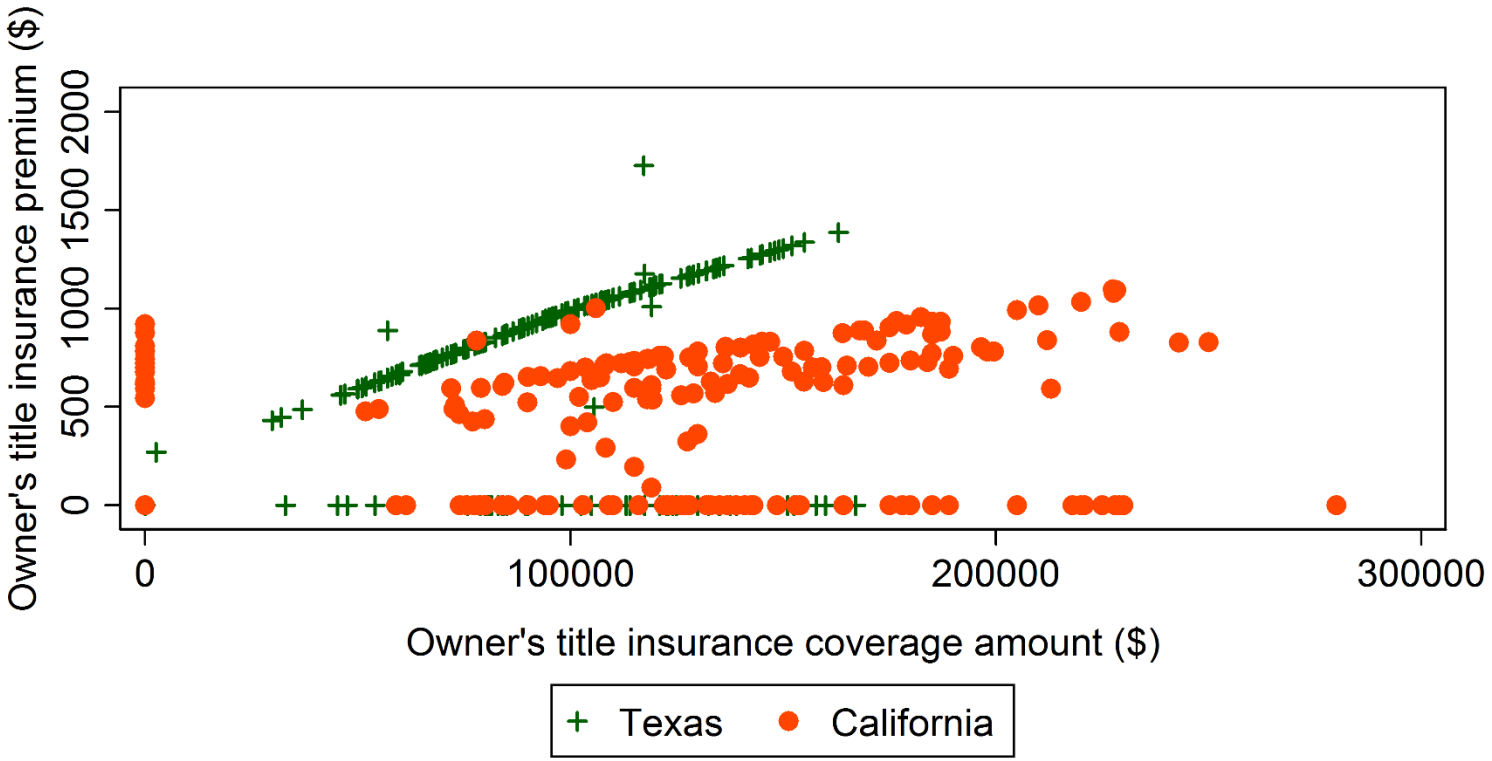
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.4 Comparison of Owner's Premium Between Texas and Arkansas



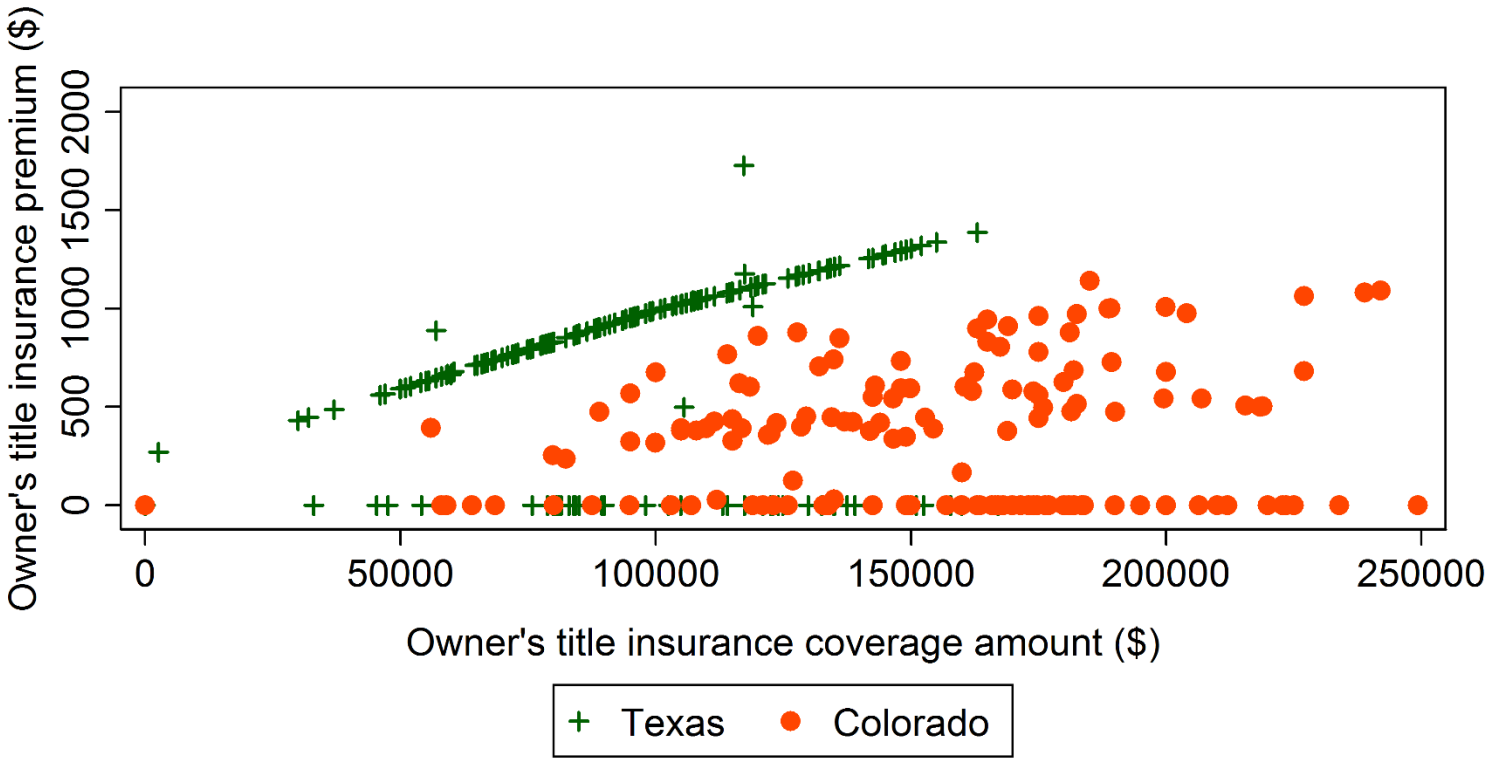
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.5 Comparison of Owner's Premium Between Texas and California



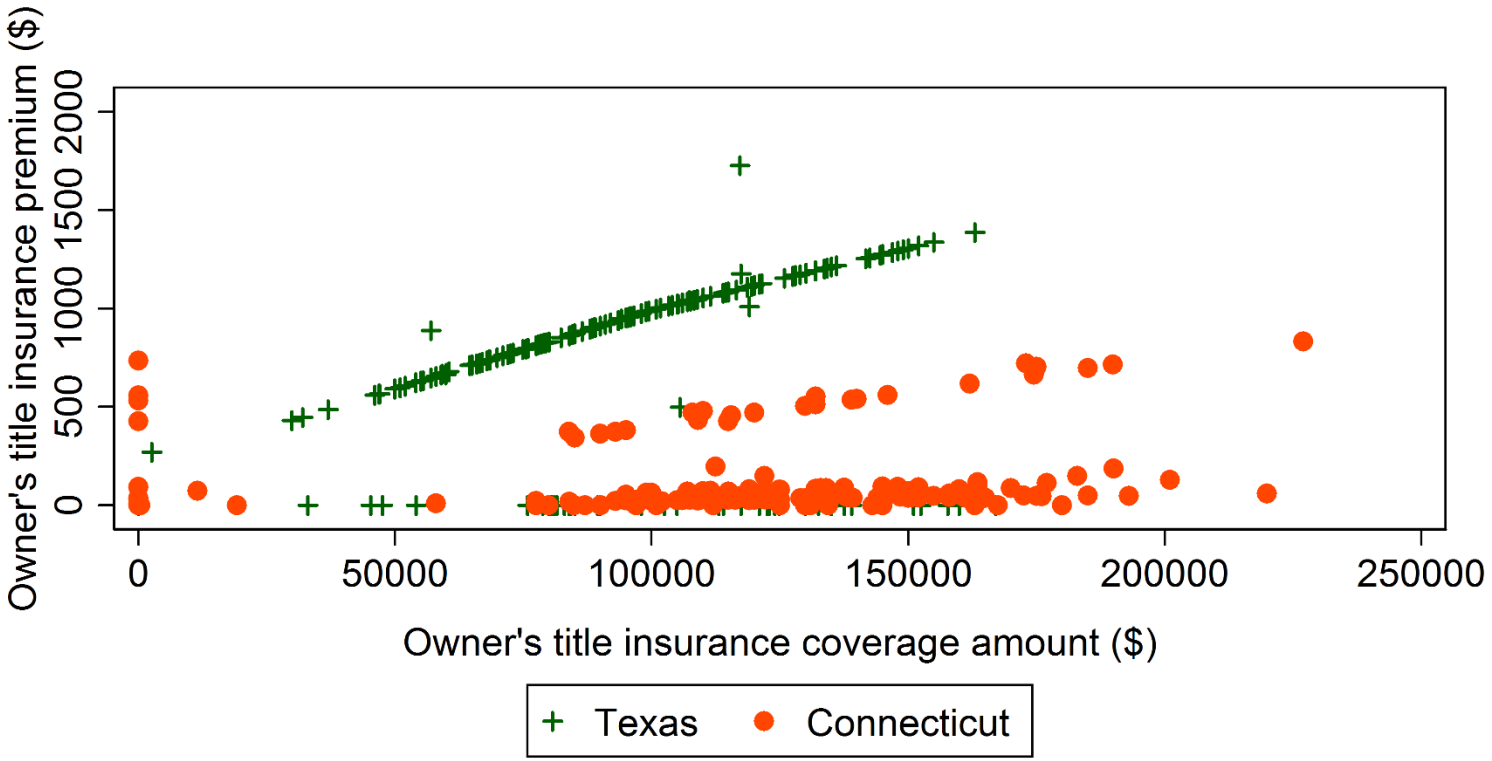
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.6 Comparison of Owner's Premium Between Texas and Colorado



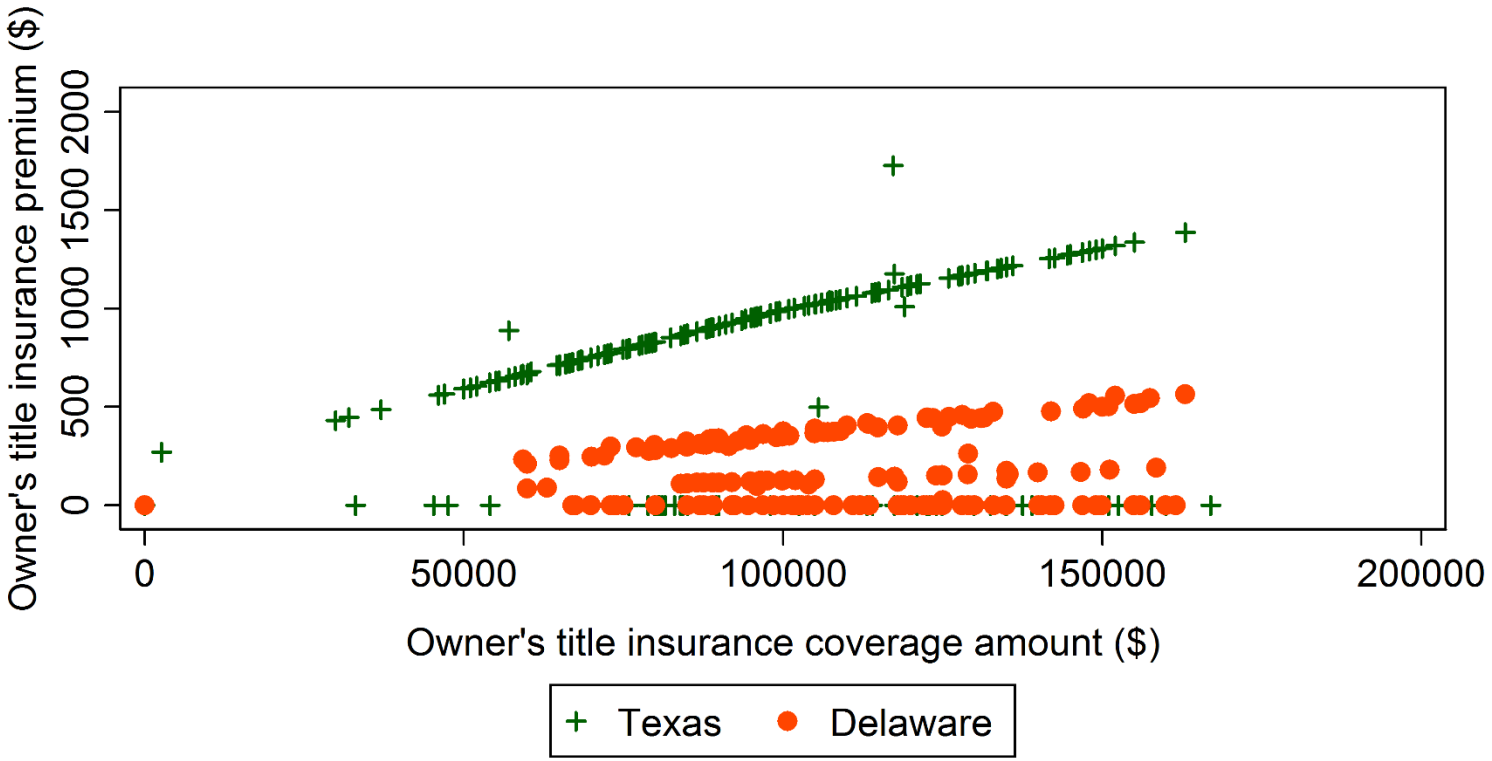
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.7 Comparison of Owner's Premium Between Texas and Connecticut



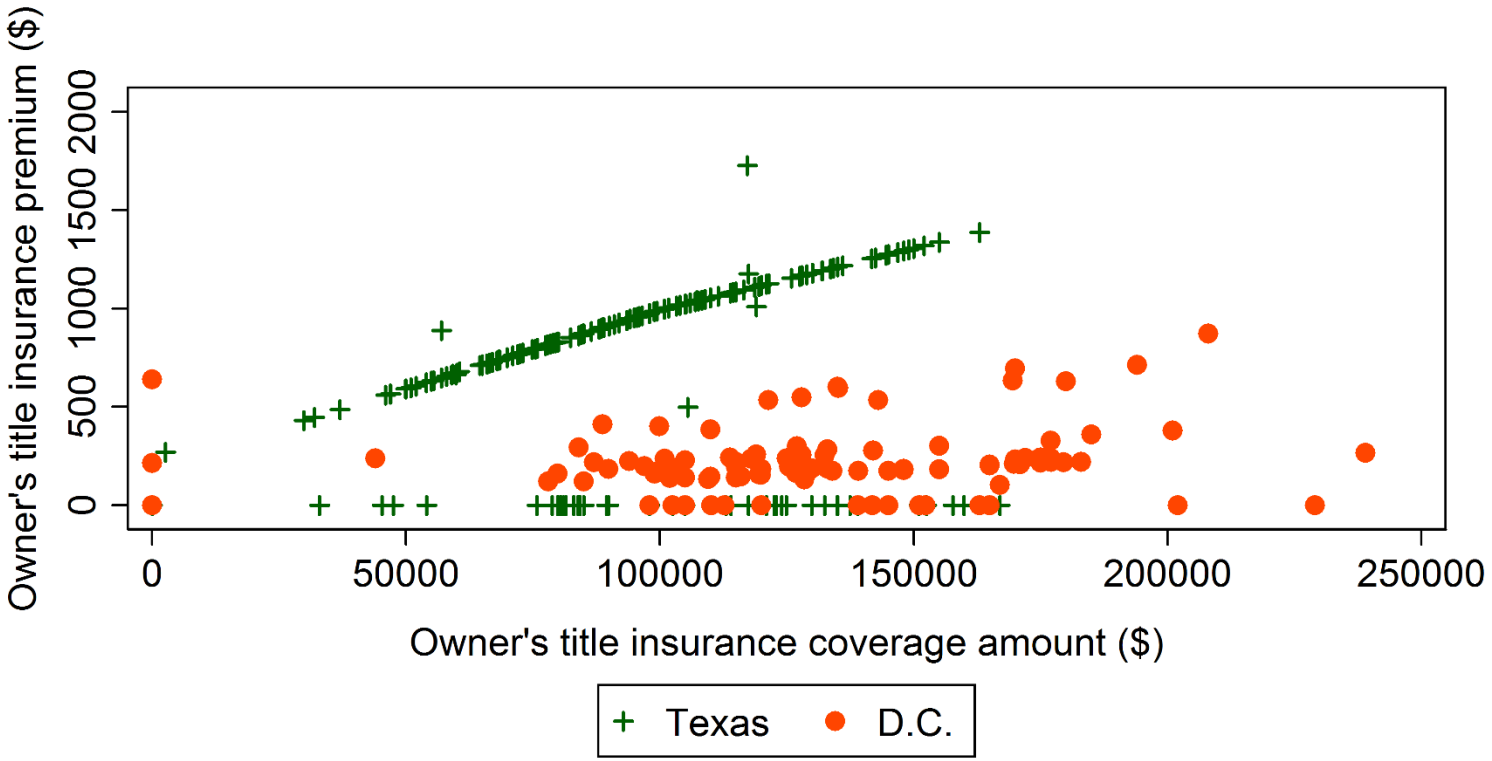
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.8 Comparison of Owner's Premium Between Texas and Delaware



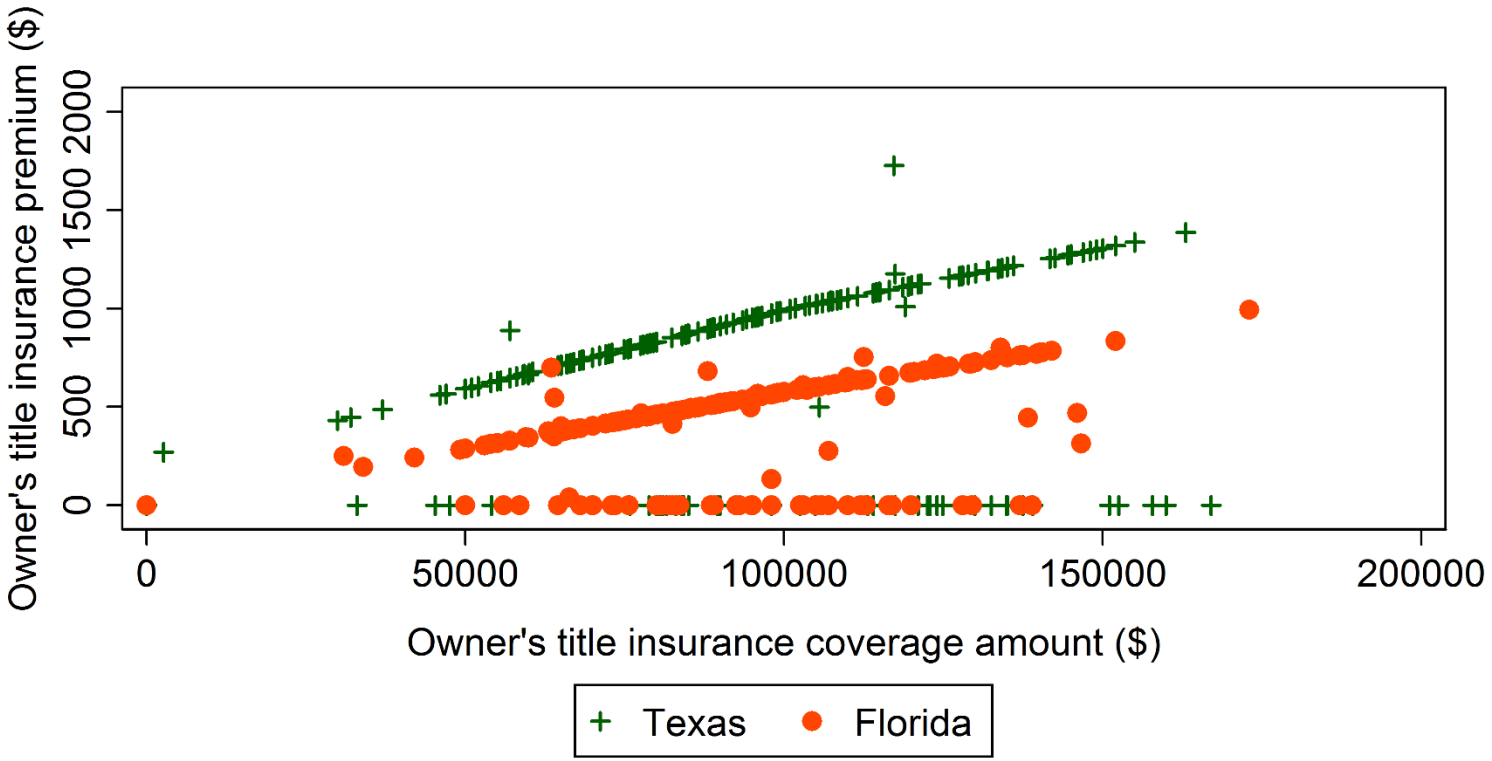
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.9 Comparison of Owner's Premium Between Texas and D.C.



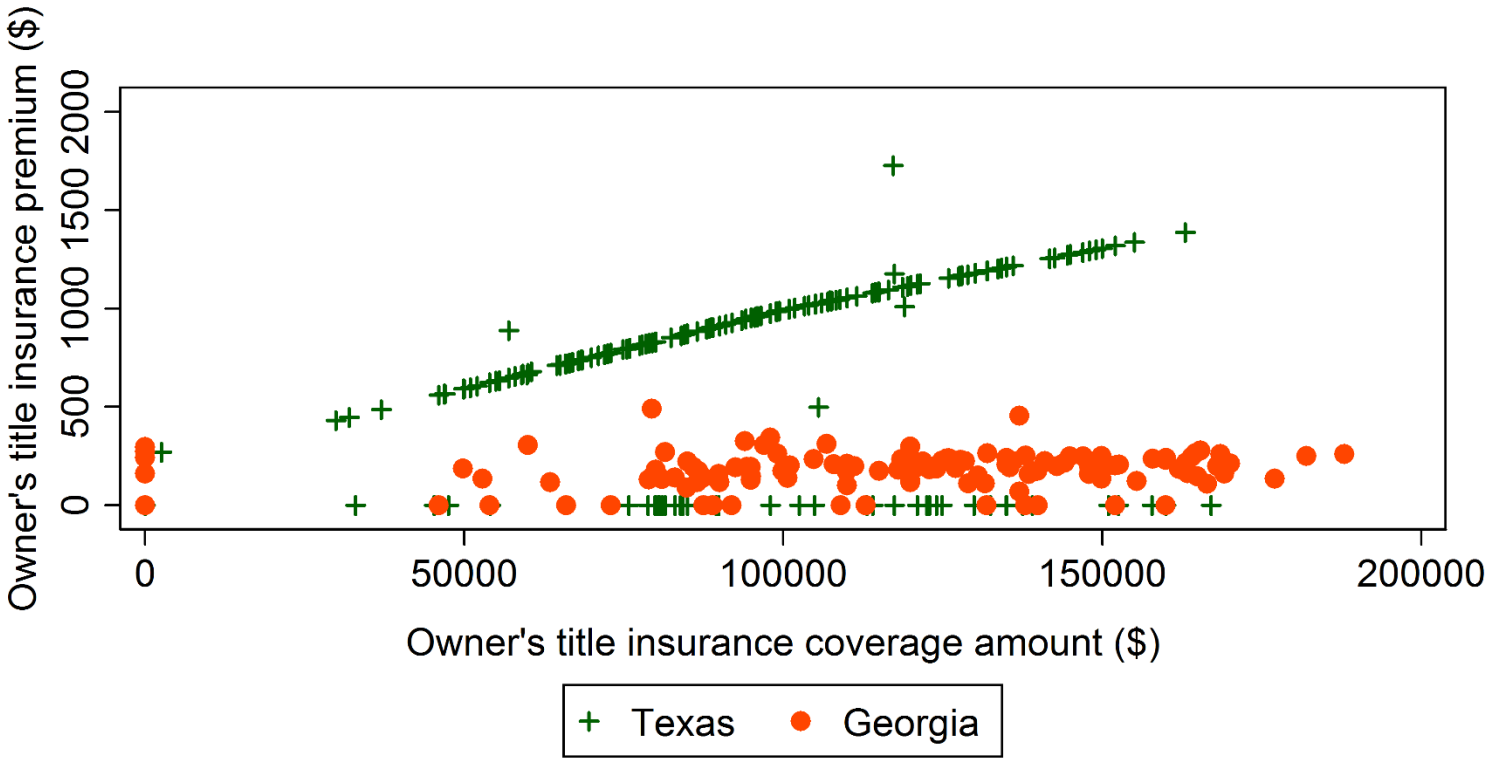
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.10 Comparison of Owner's Premium Between Texas and Florida



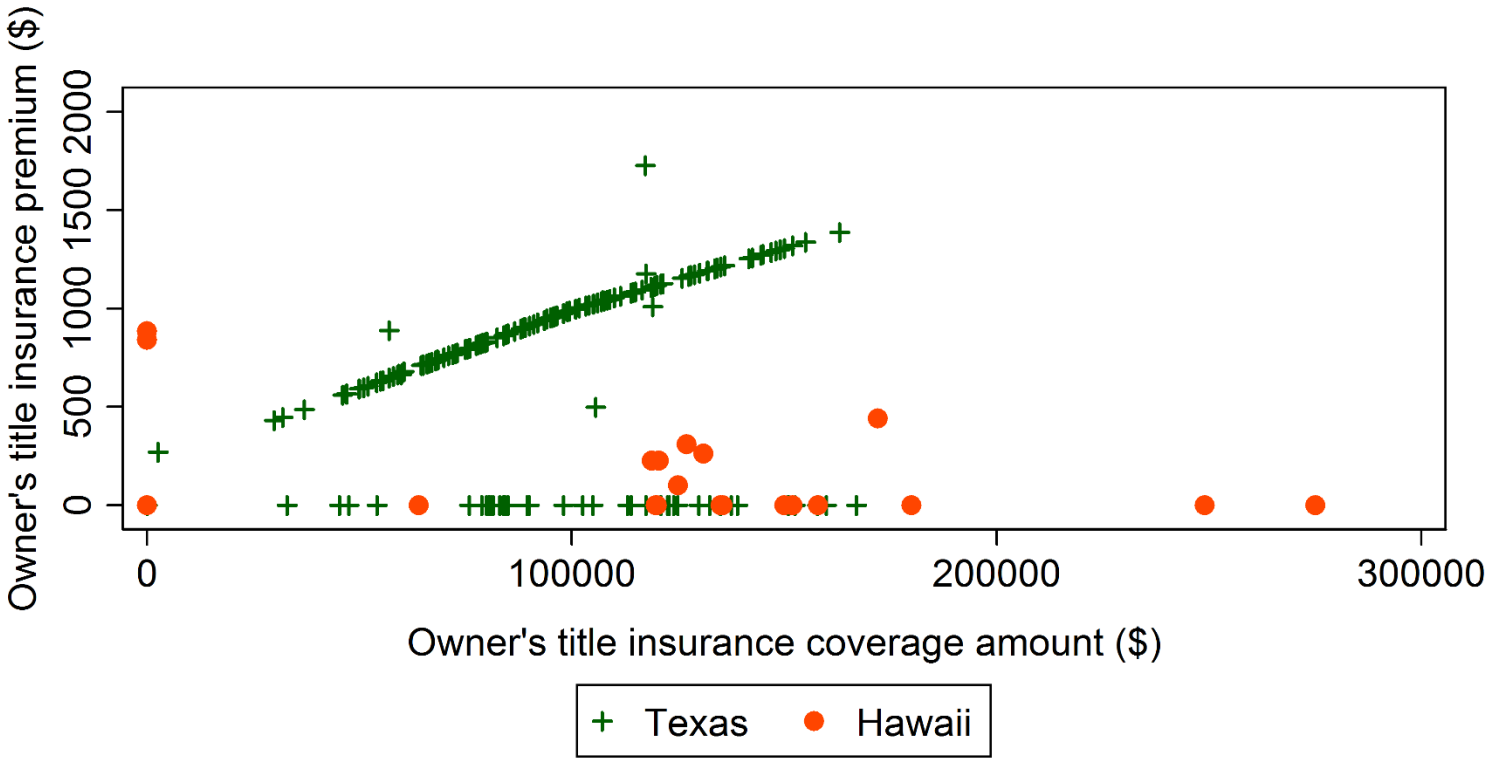
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.11 Comparison of Owner's Premium Between Texas and Georgia



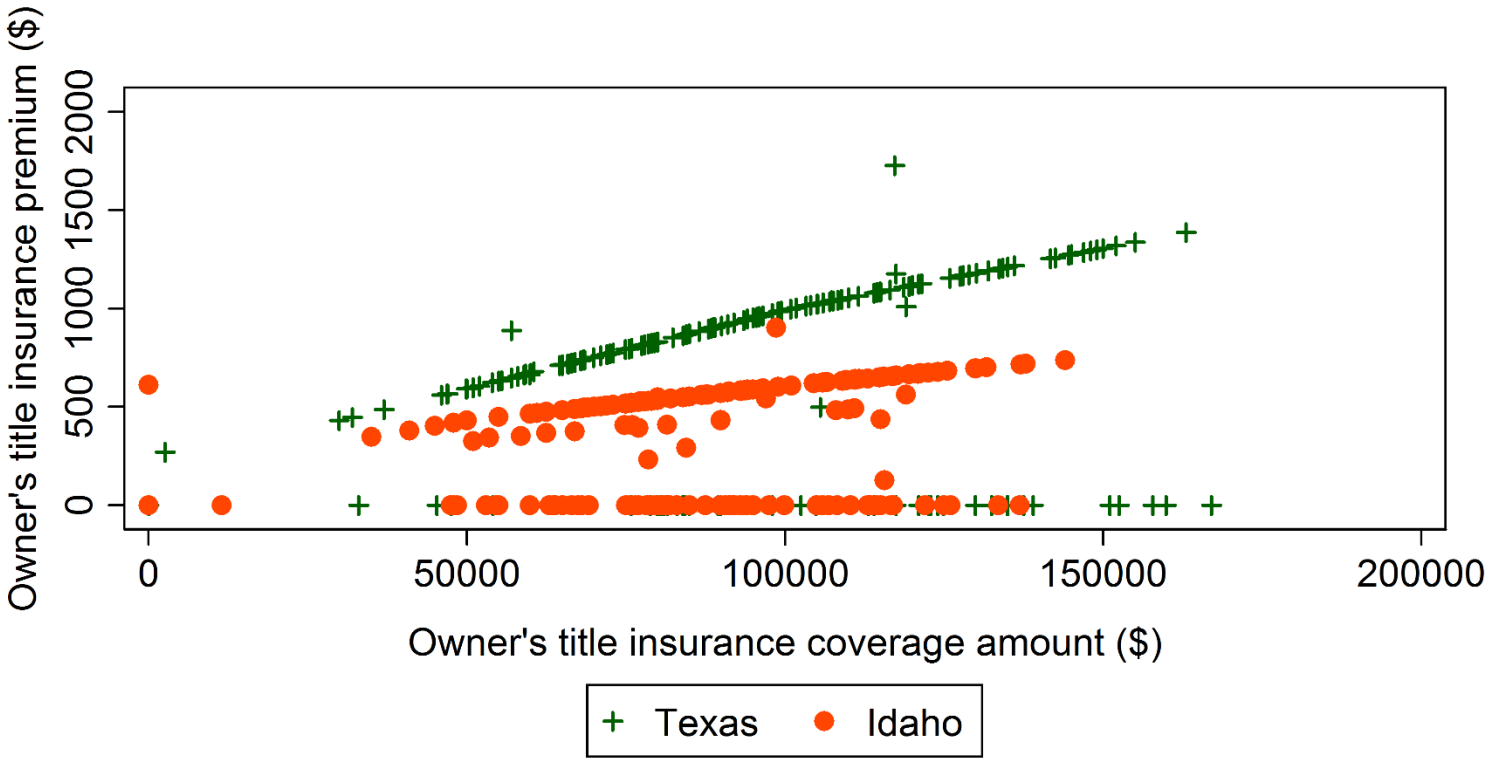
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.12 Comparison of Owner's Premium Between Texas and Hawaii



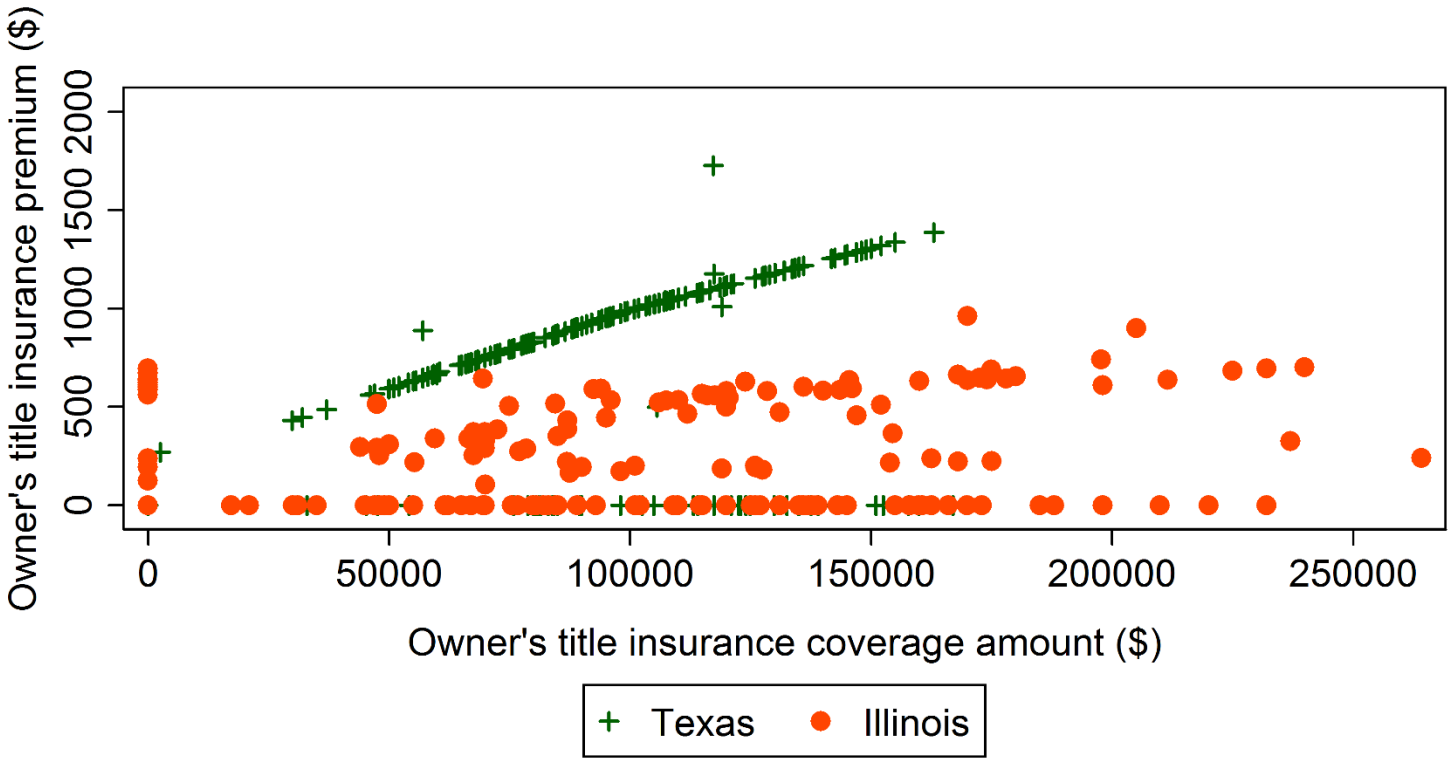
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.13 Comparison of Owner's Premium Between Texas and Idaho



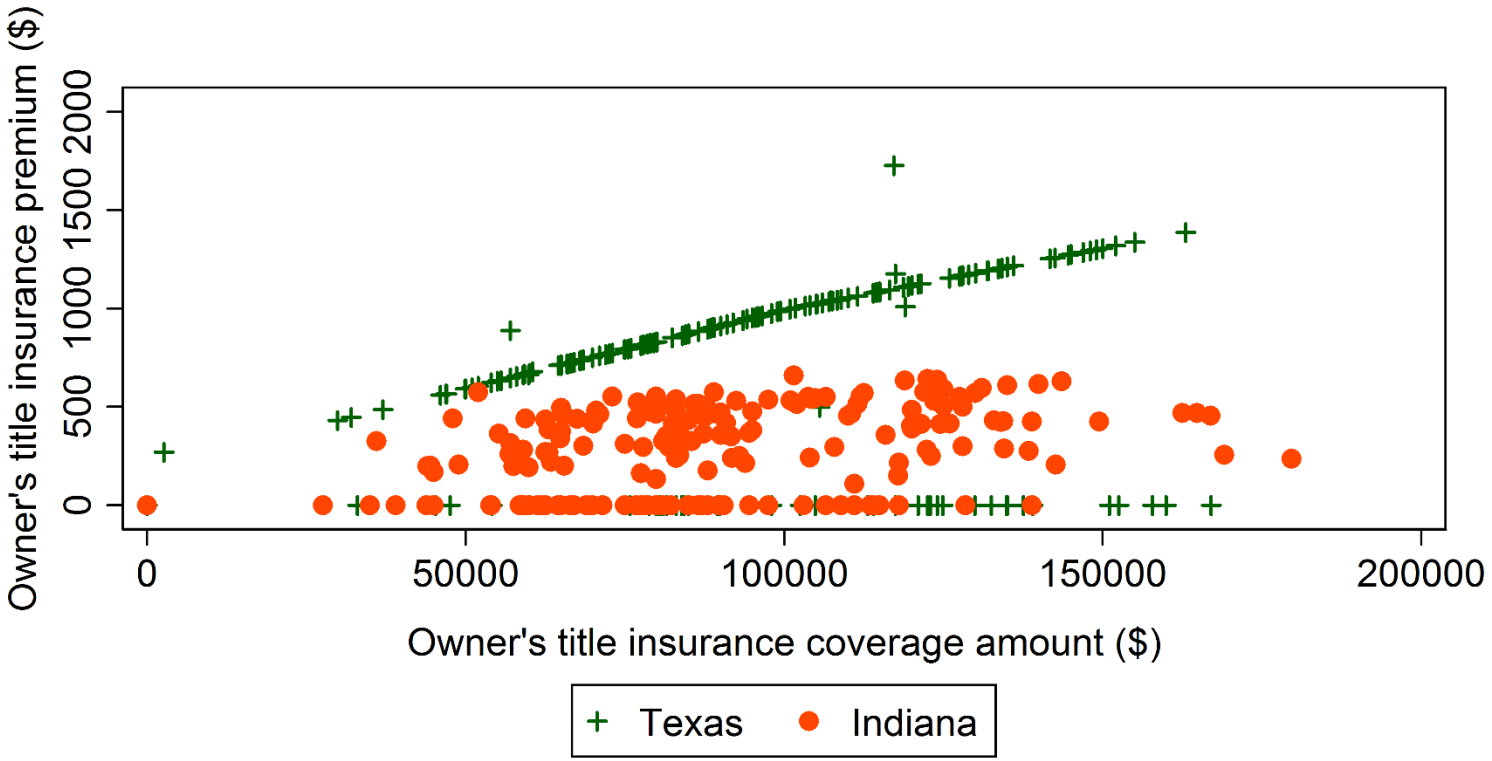
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.14 Comparison of Owner's Premium Between Texas and Illinois



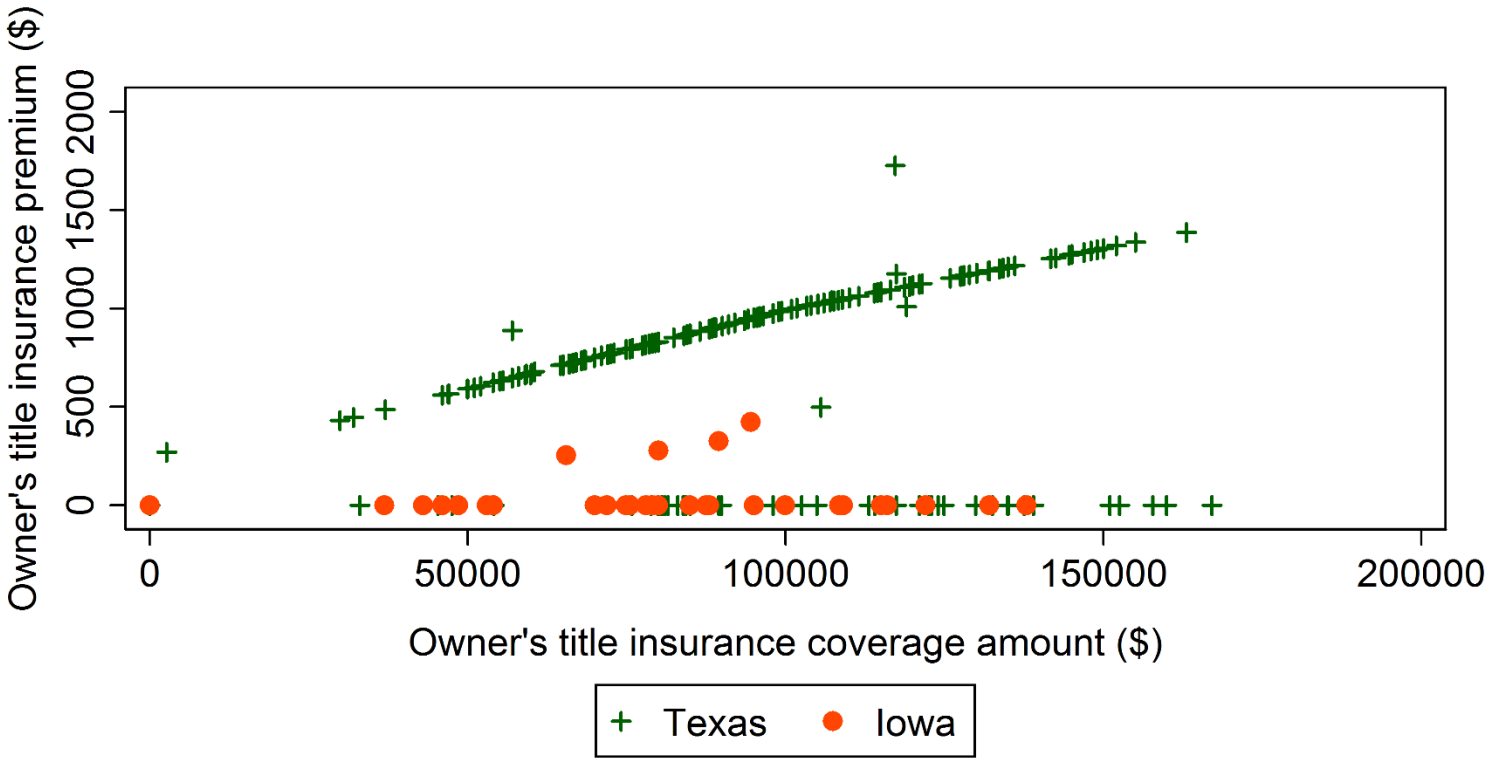
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.15 Comparison of Owner's Premium Between Texas and Indiana



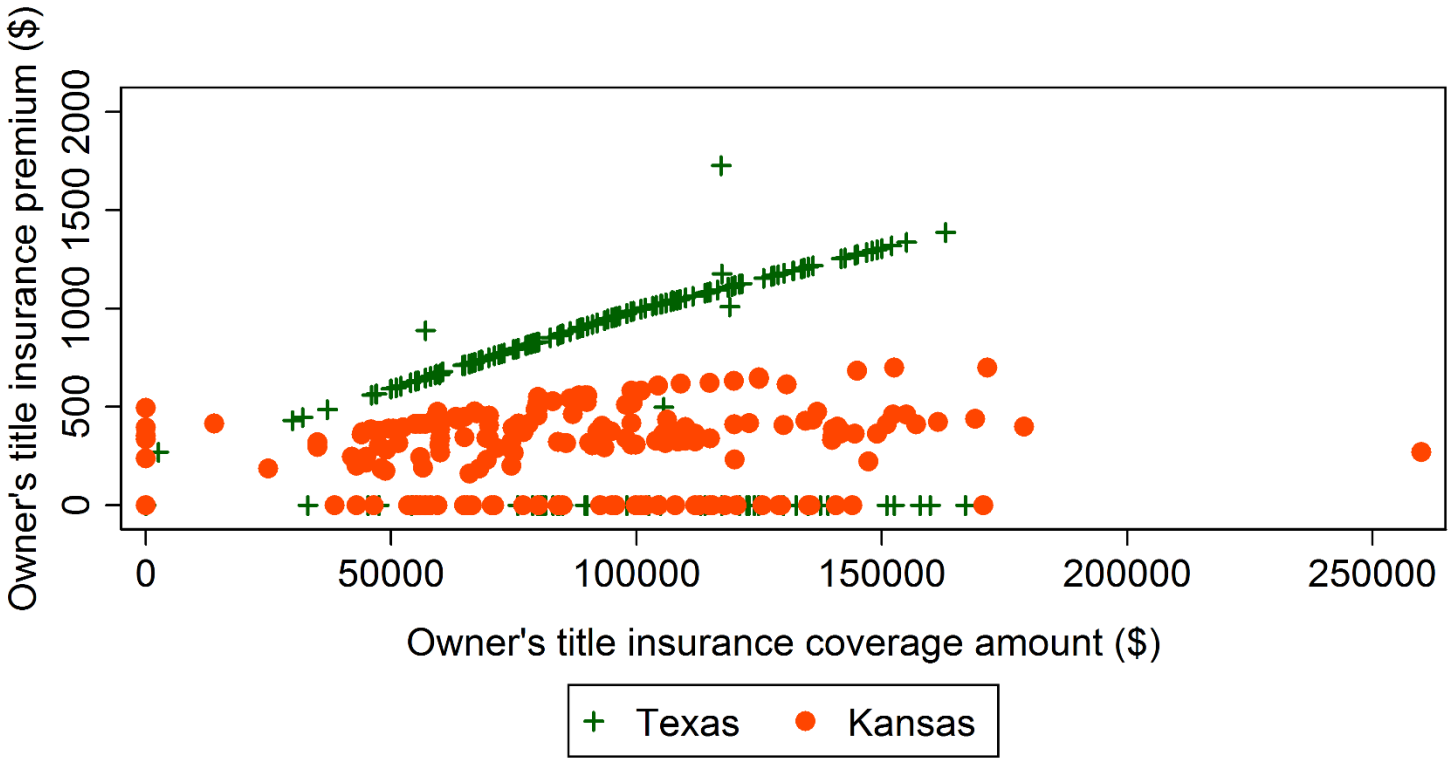
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.16 Comparison of Owner's Premium Between Texas and Iowa



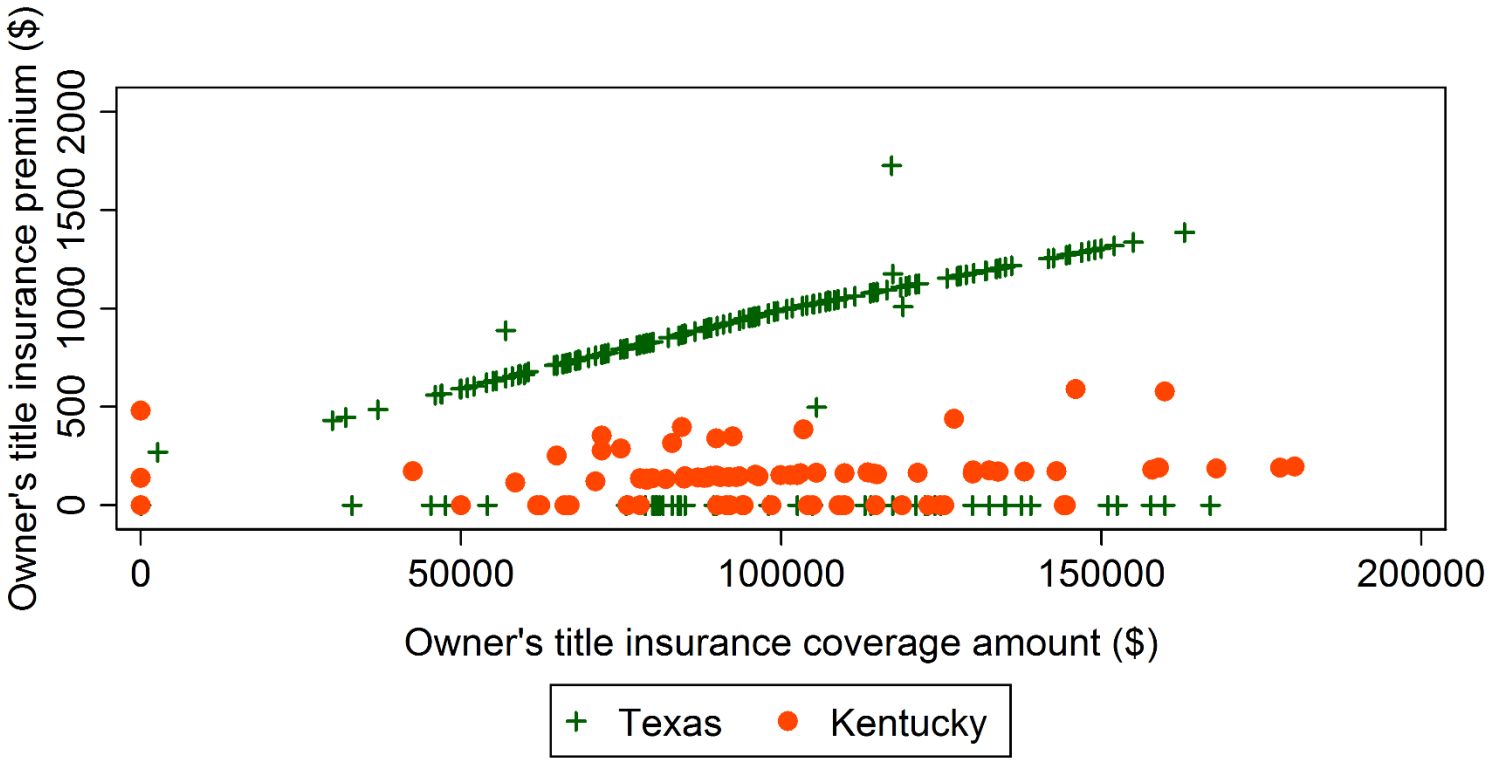
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.17 Comparison of Owner's Premium Between Texas and Kansas



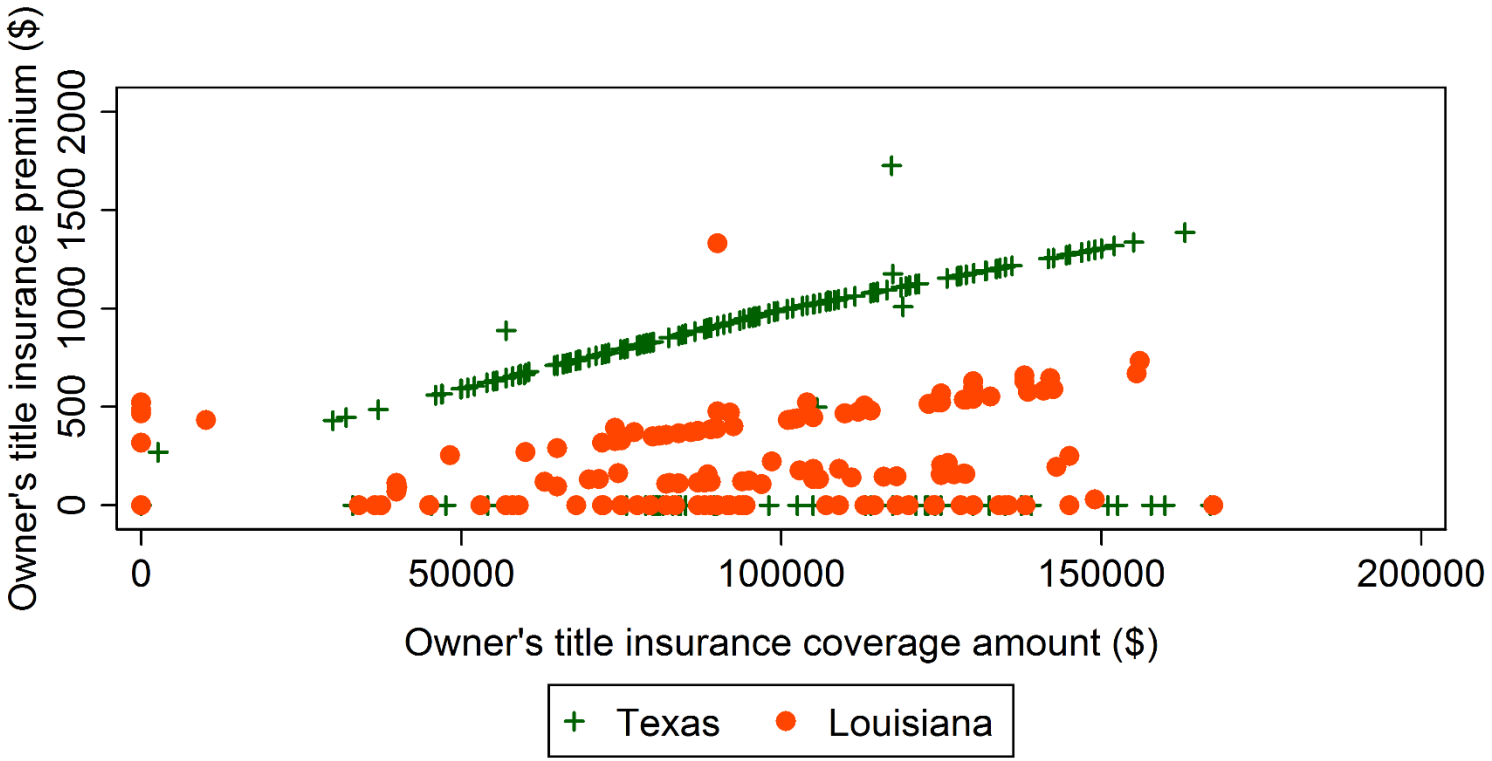
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.18 Comparison of Owner's Premium Between Texas and Kentucky



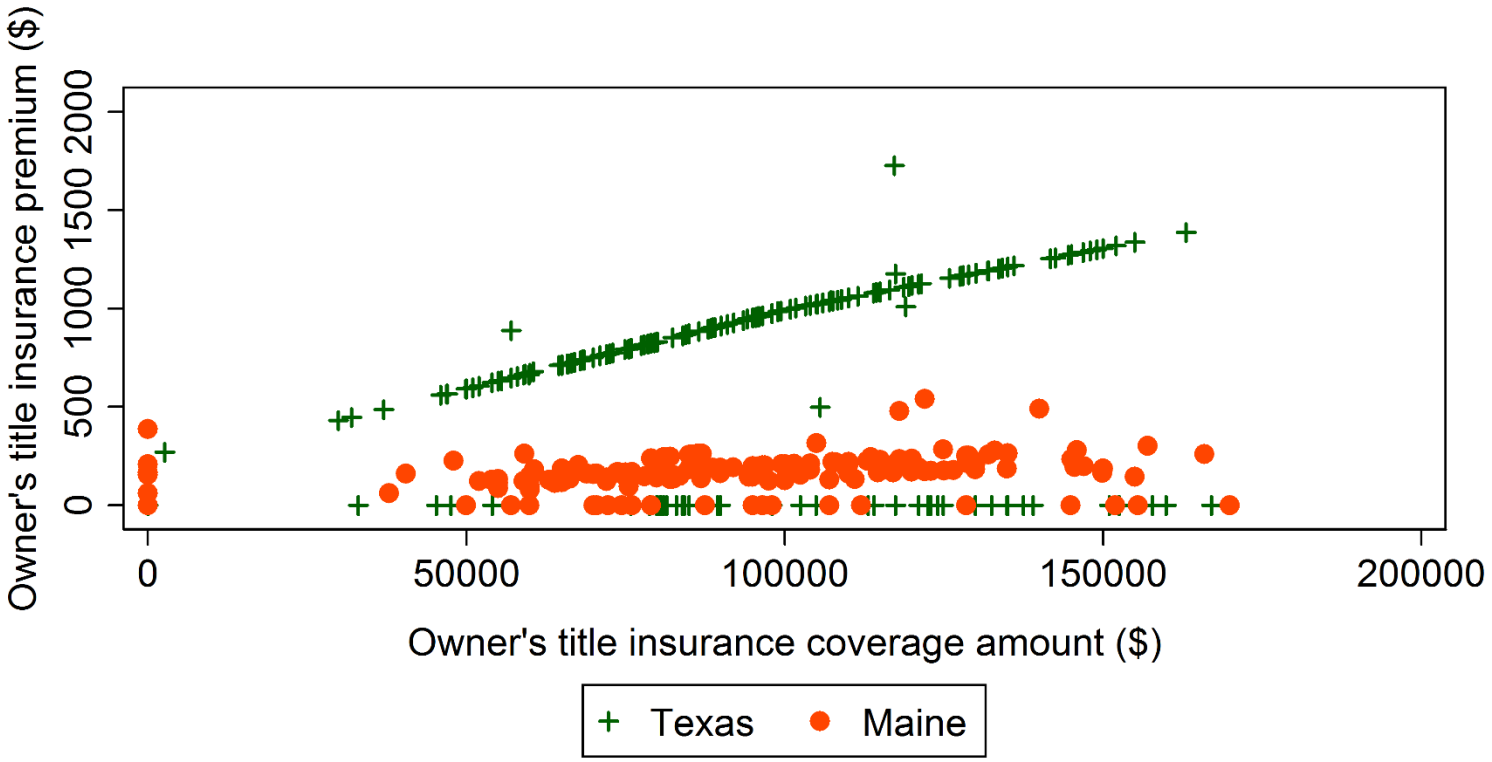
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.19 Comparison of Owner's Premium Between Texas and Louisiana



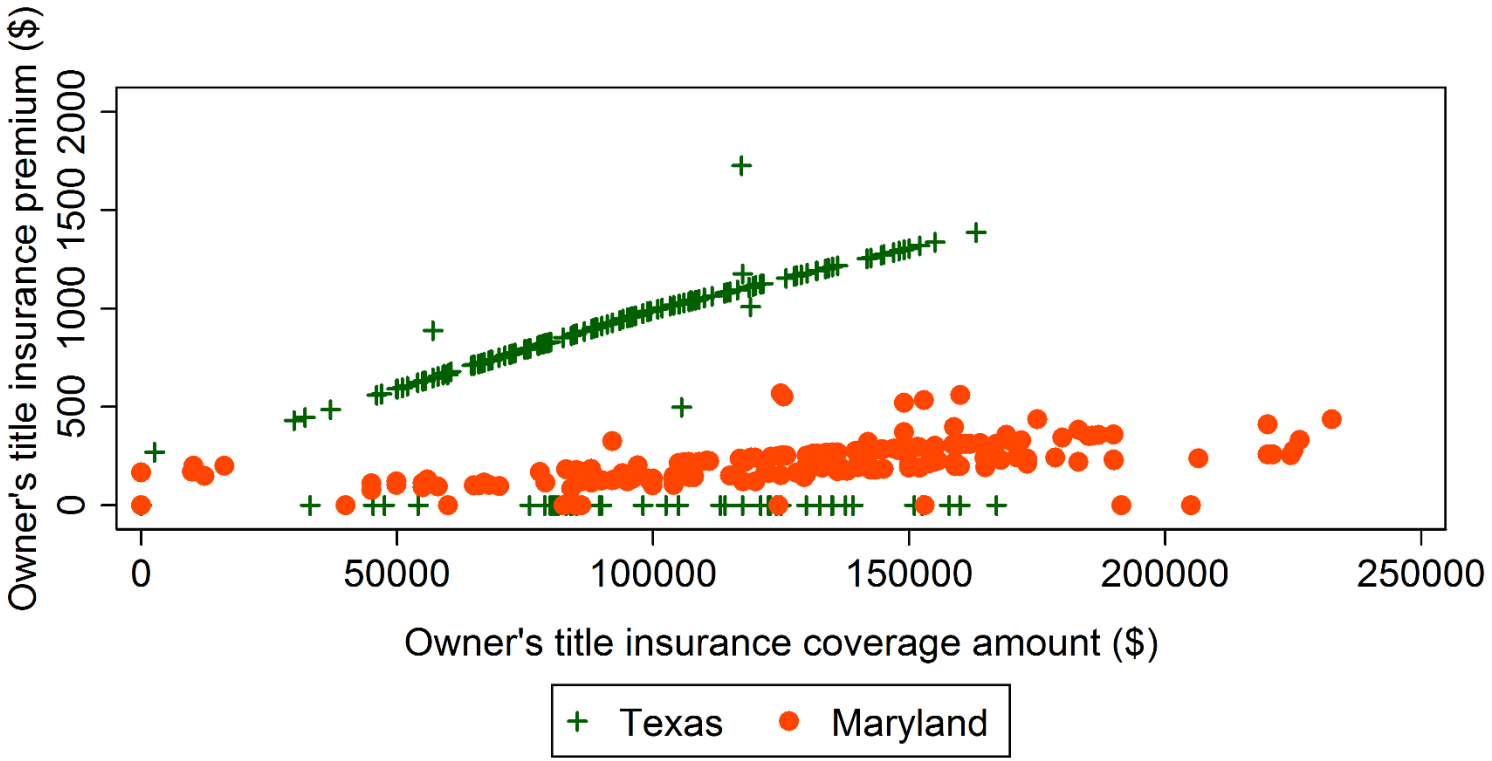
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.20 Comparison of Owner's Premium Between Texas and Maine



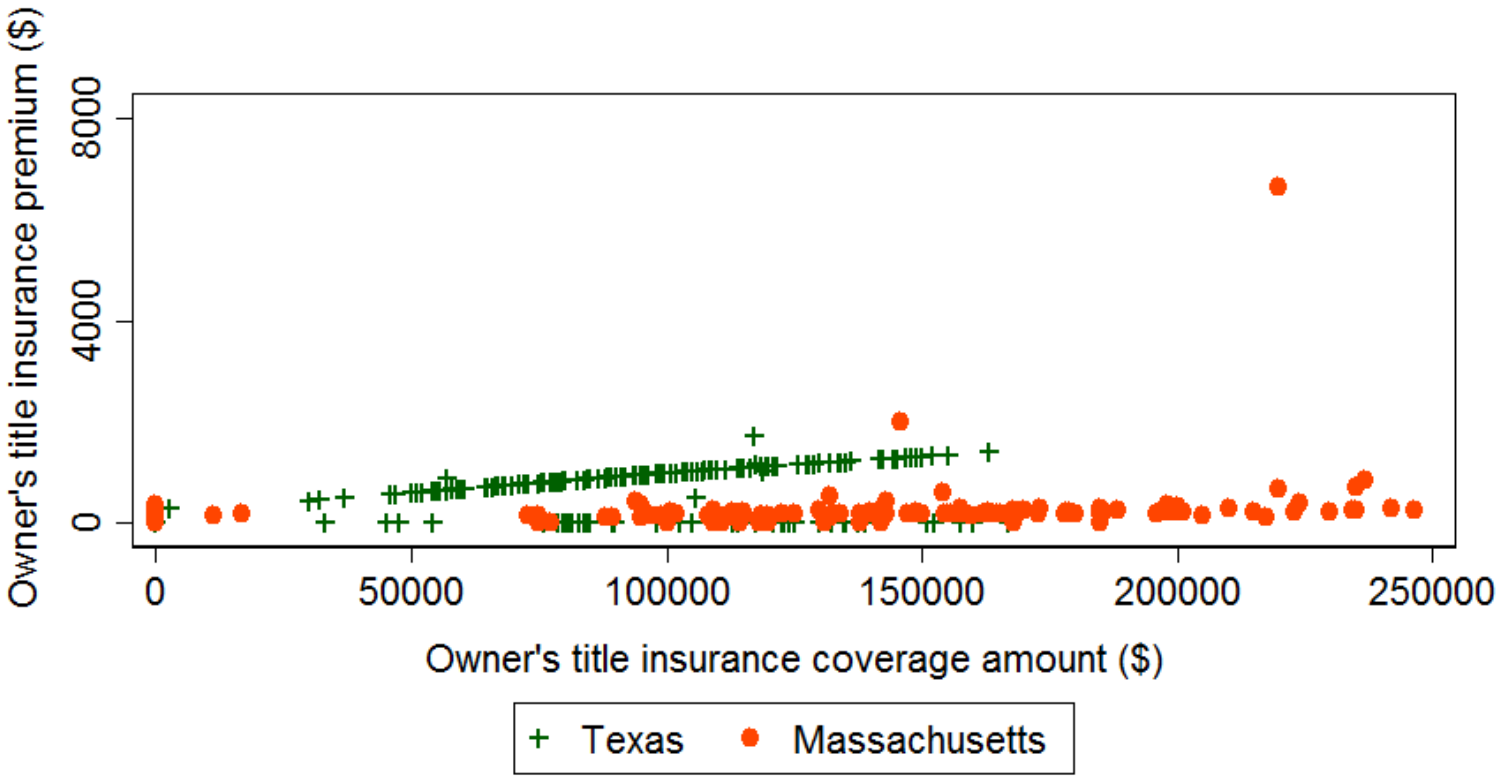
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.21 Comparison of Owner's Premium Between Texas and Maryland



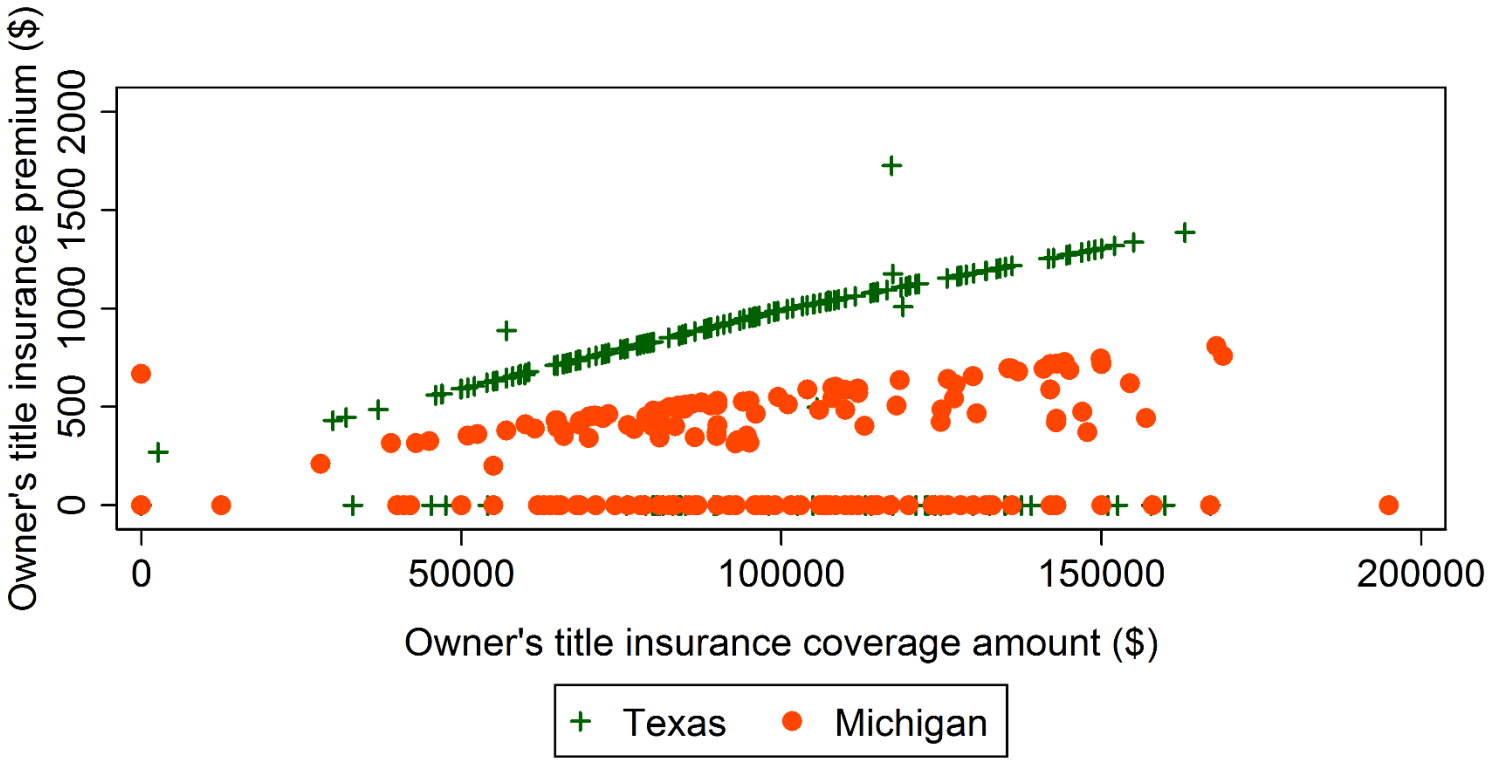
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.22 Comparison of Owner's Premium Between Texas and Massachusetts



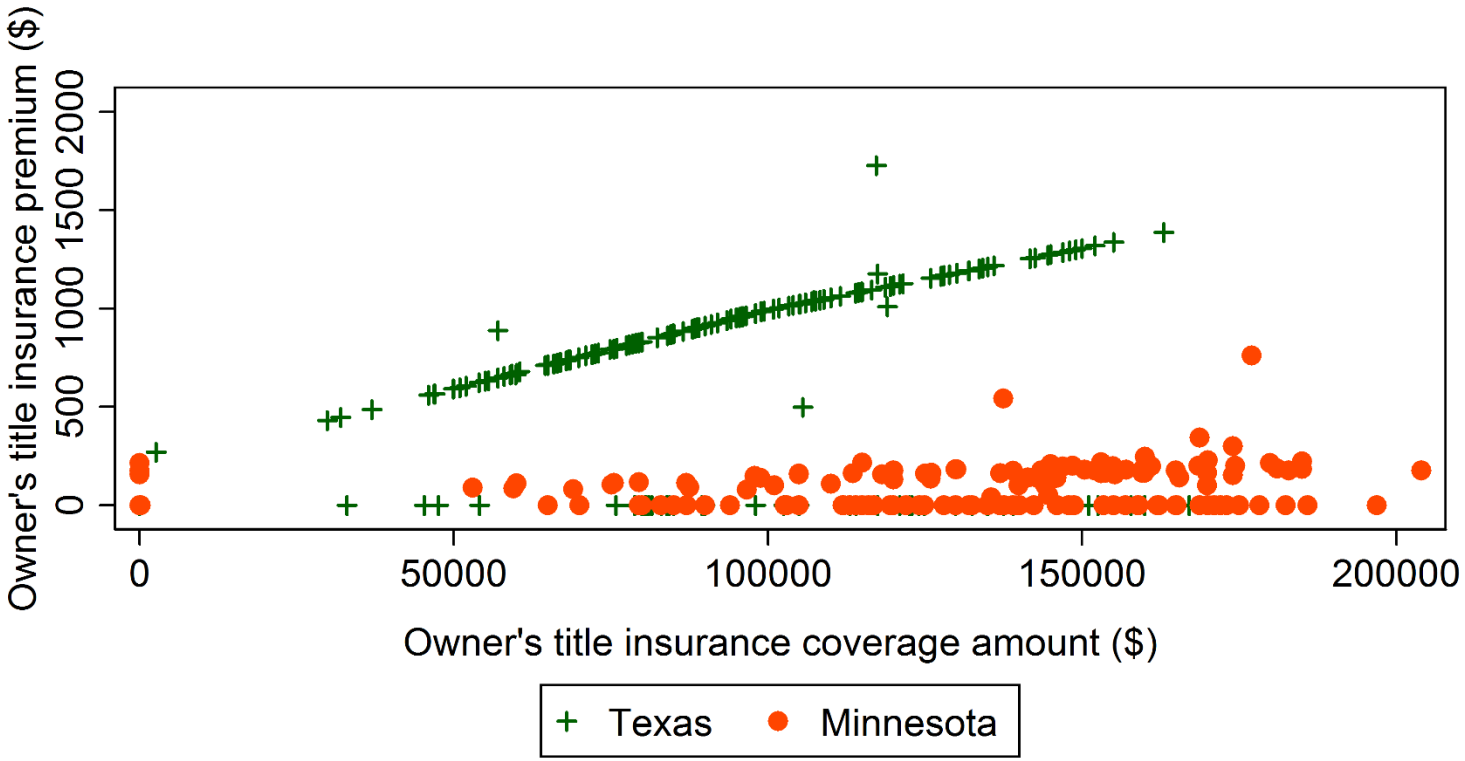
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.23 Comparison of Owner's Premium Between Texas and Michigan



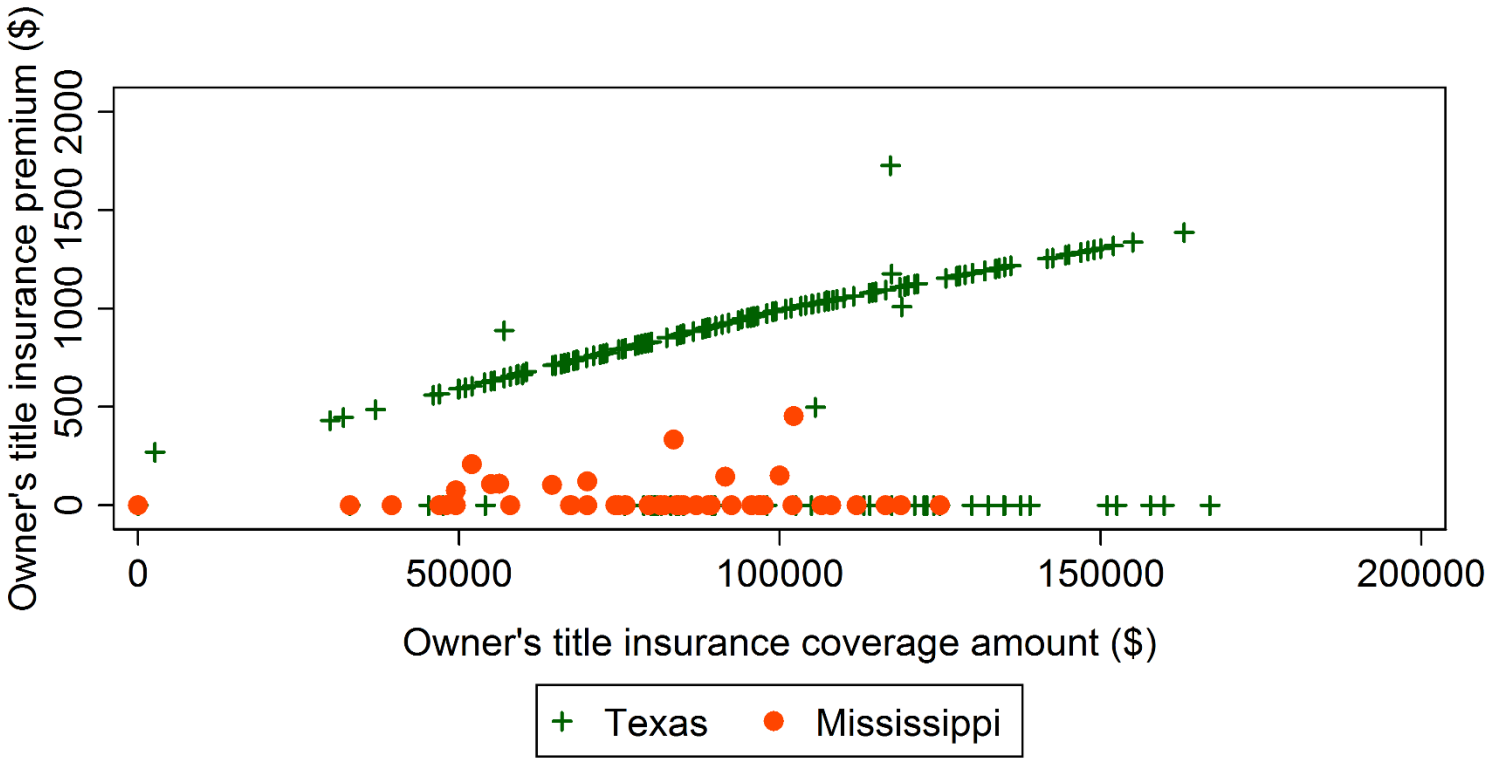
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.24 Comparison of Owner's Premium Between Texas and Minnesota



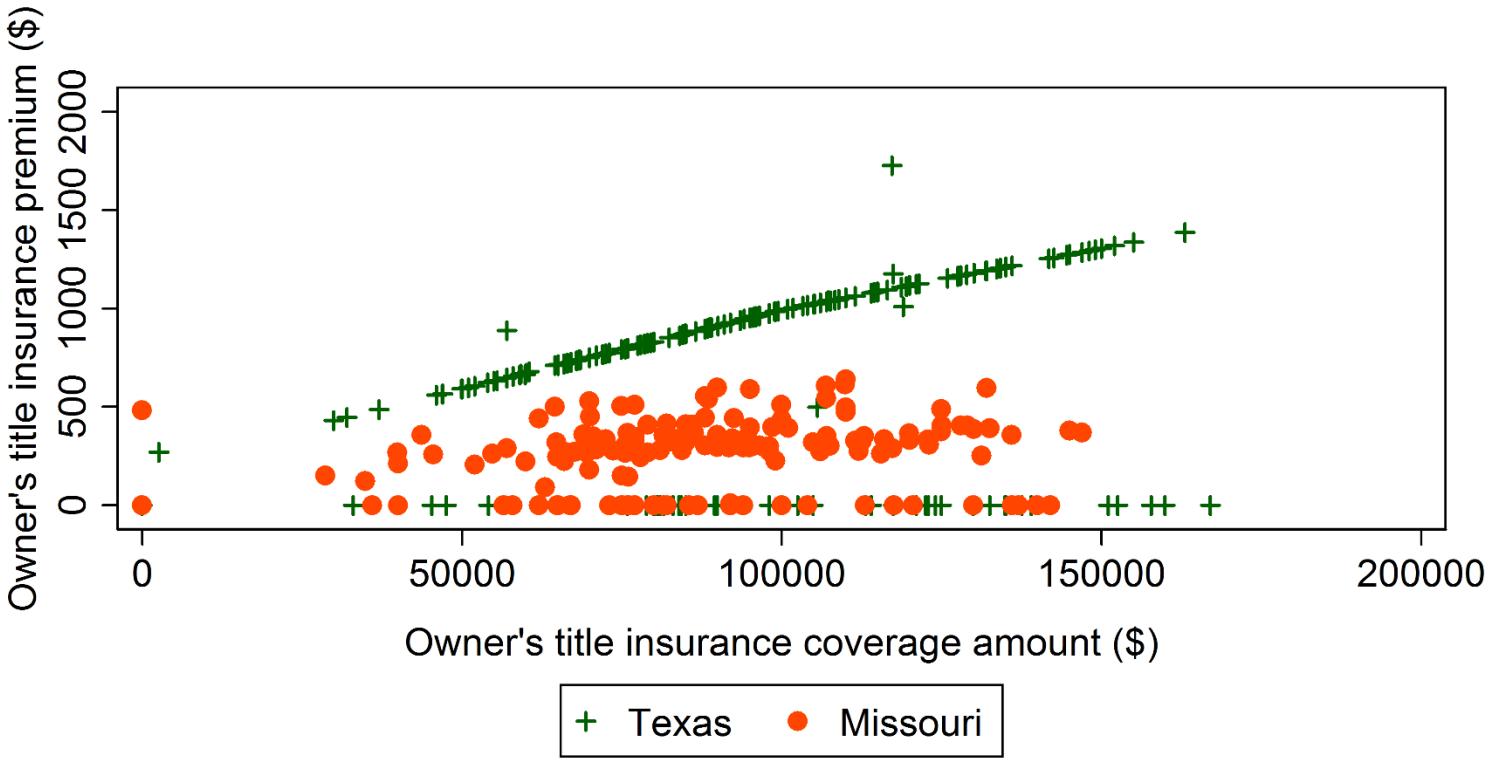
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.25 Comparison of Owner's Premium Between Texas and Mississippi



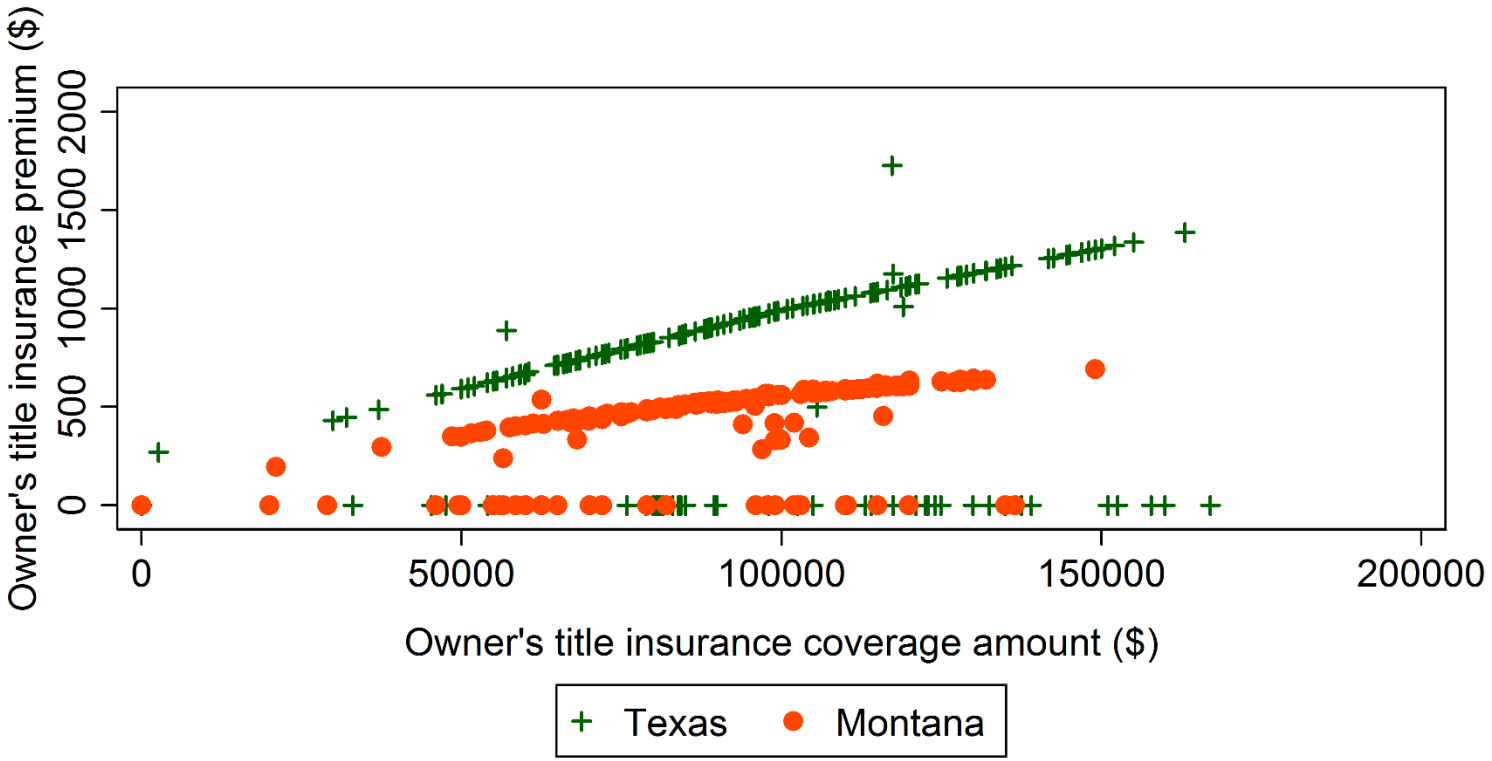
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.26 Comparison of Owner's Premium Between Texas and Missouri



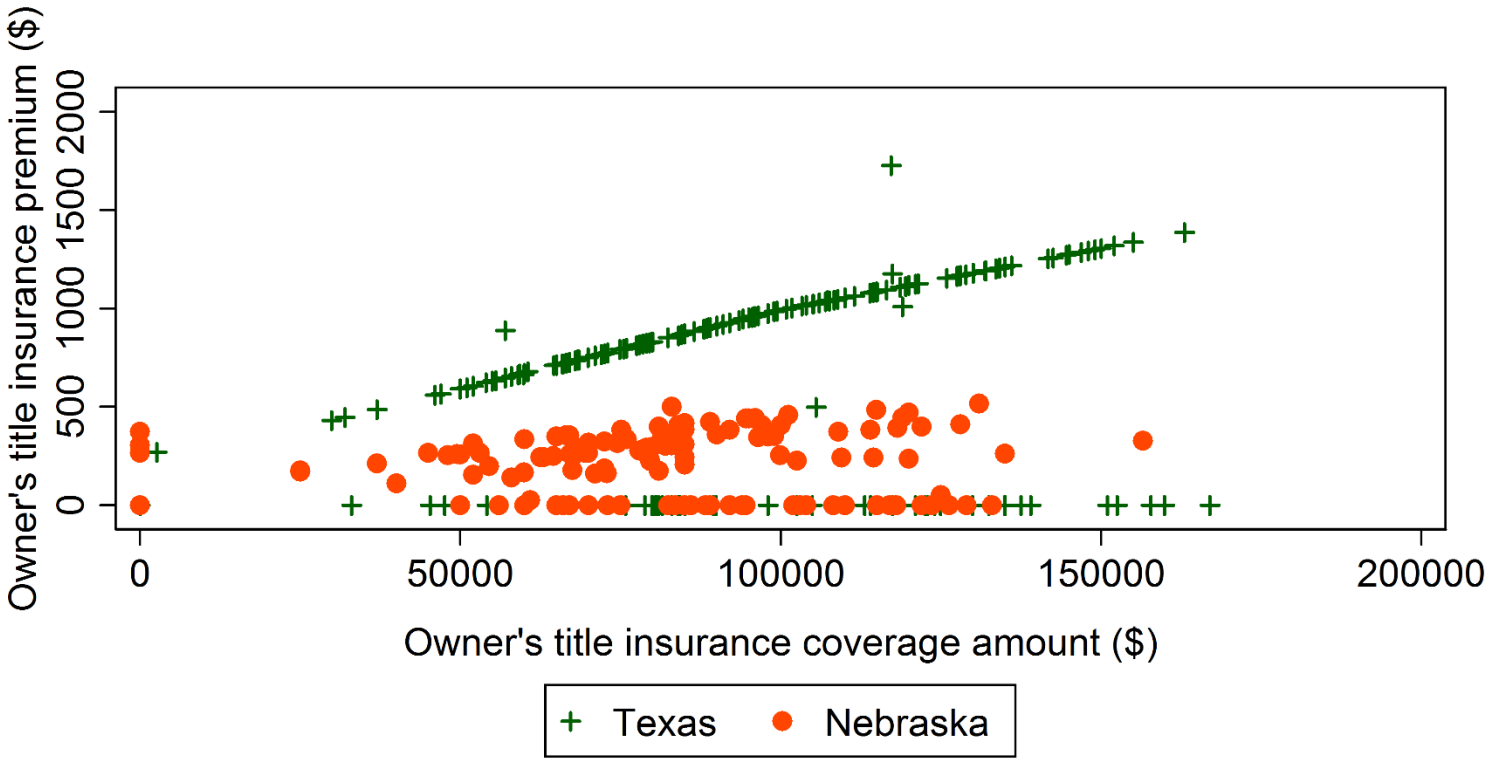
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.27 Comparison of Owner's Premium Between Texas and Montana



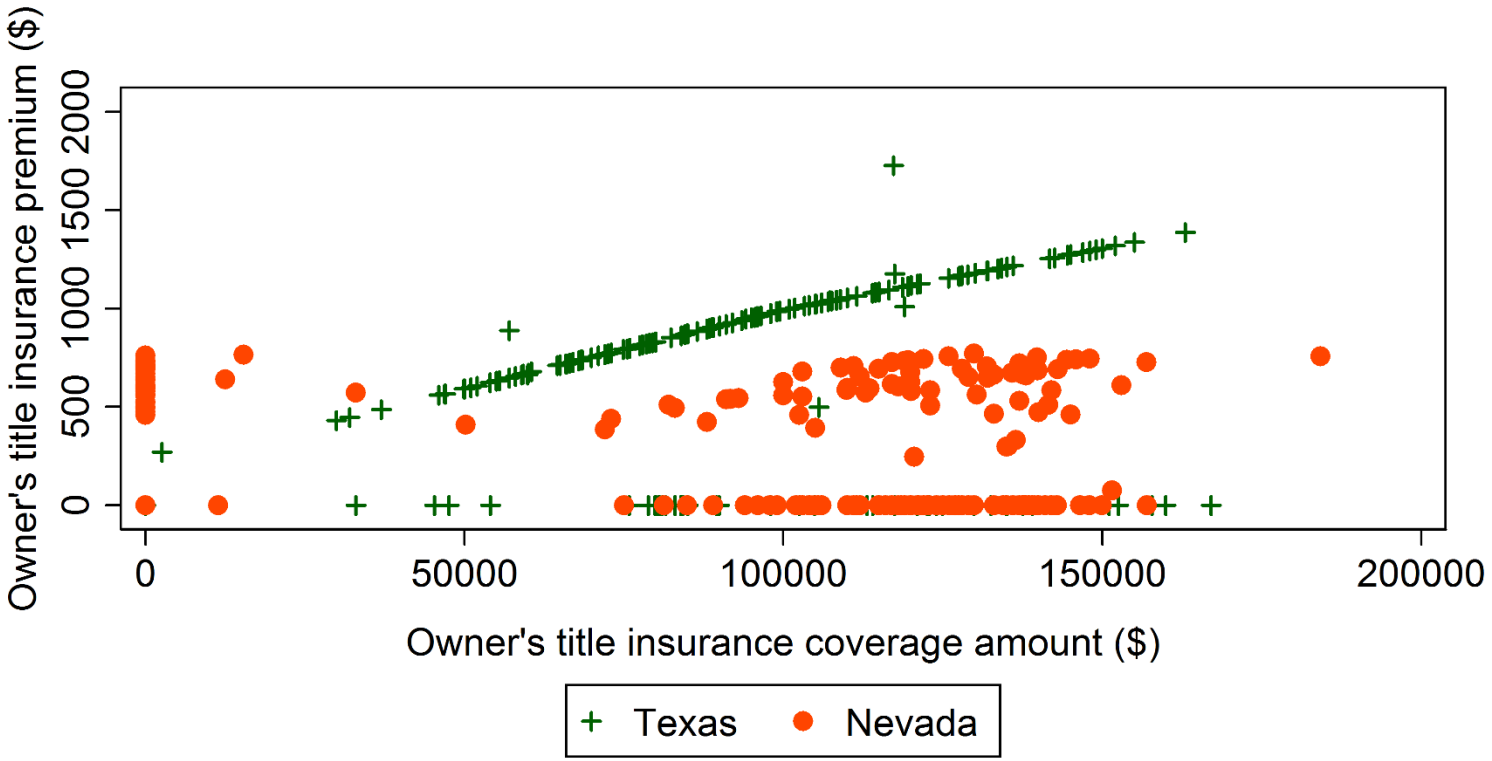
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.28 Comparison of Owner's Premium Between Texas and Nebraska



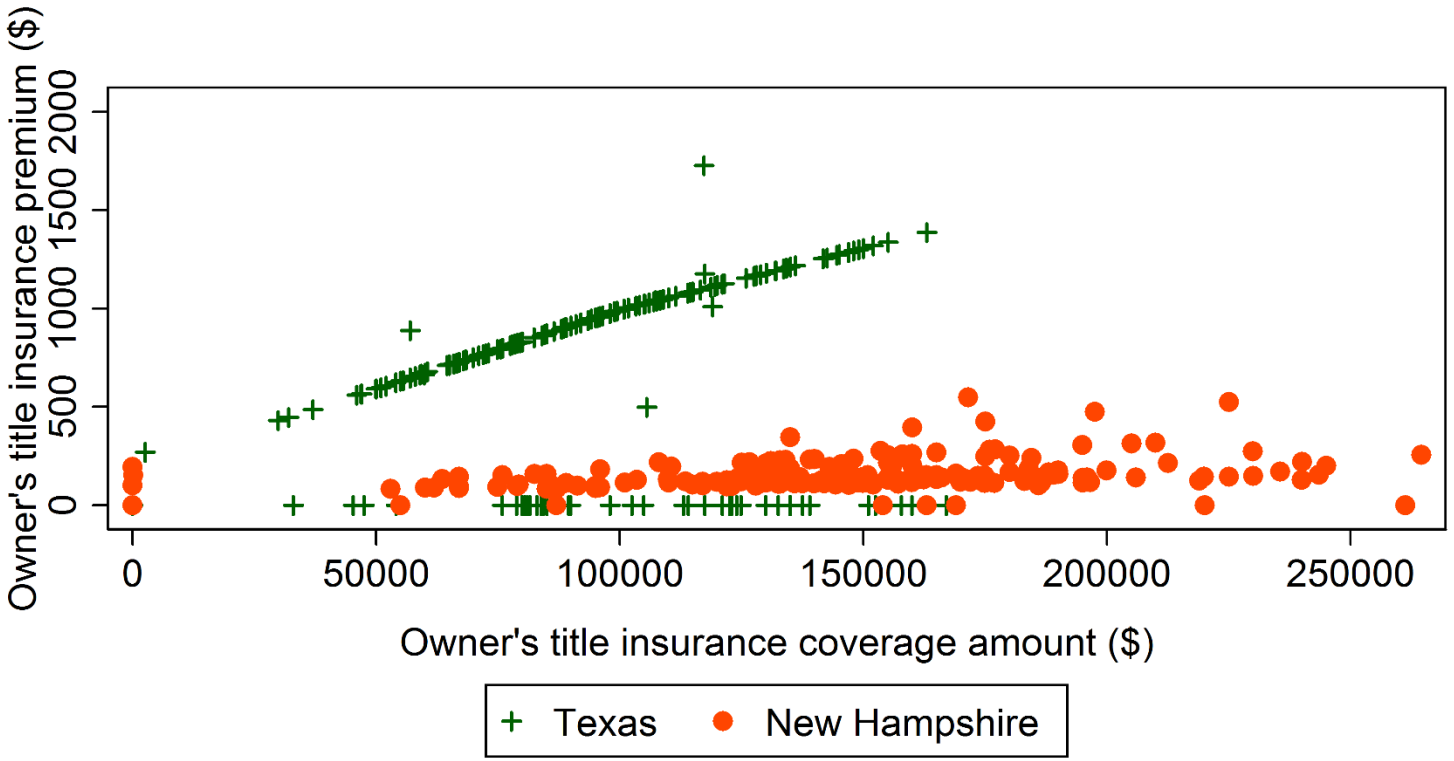
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.29 Comparison of Owner's Premium Between Texas and Nevada



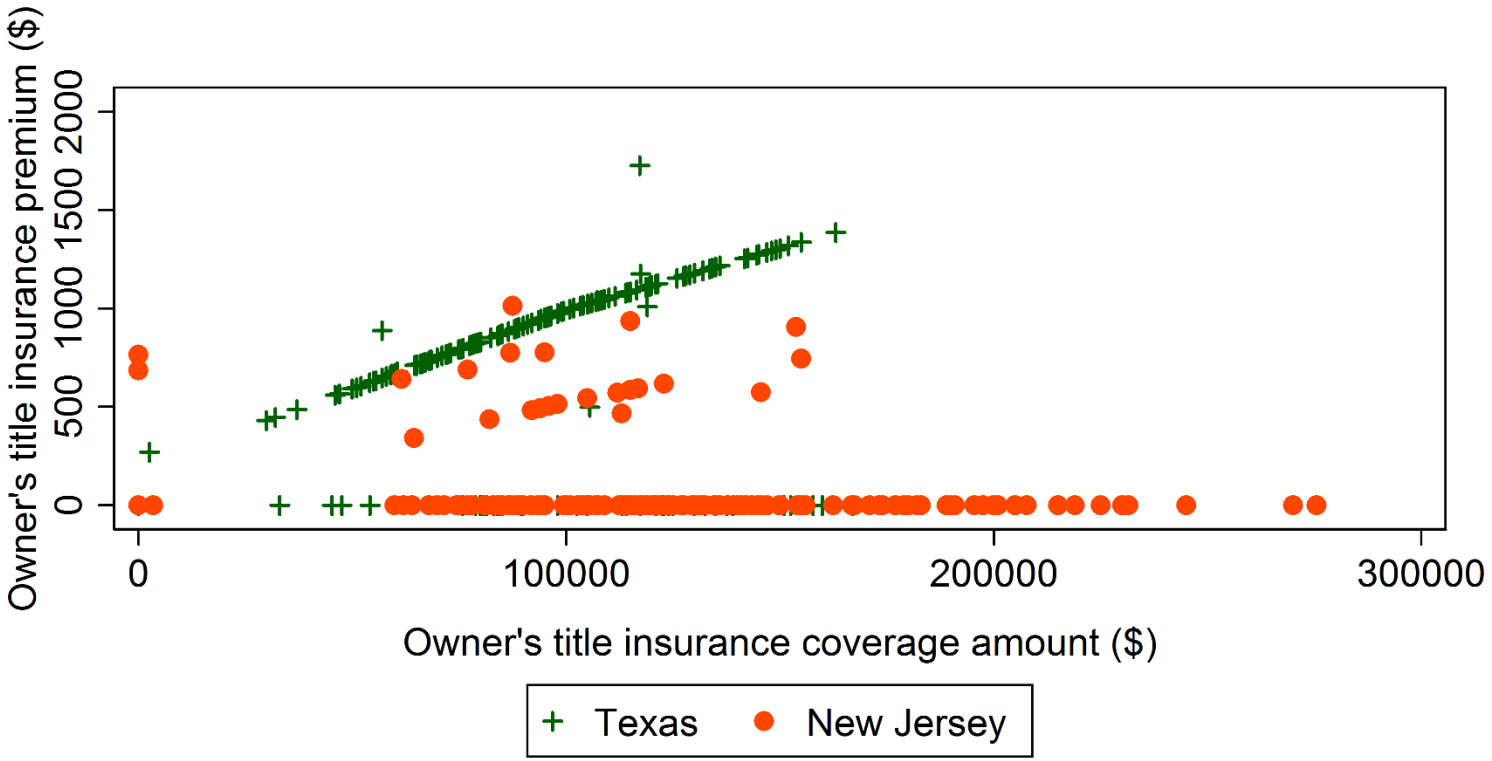
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.30 Comparison of Owner's Premium Between Texas and New Hampshi



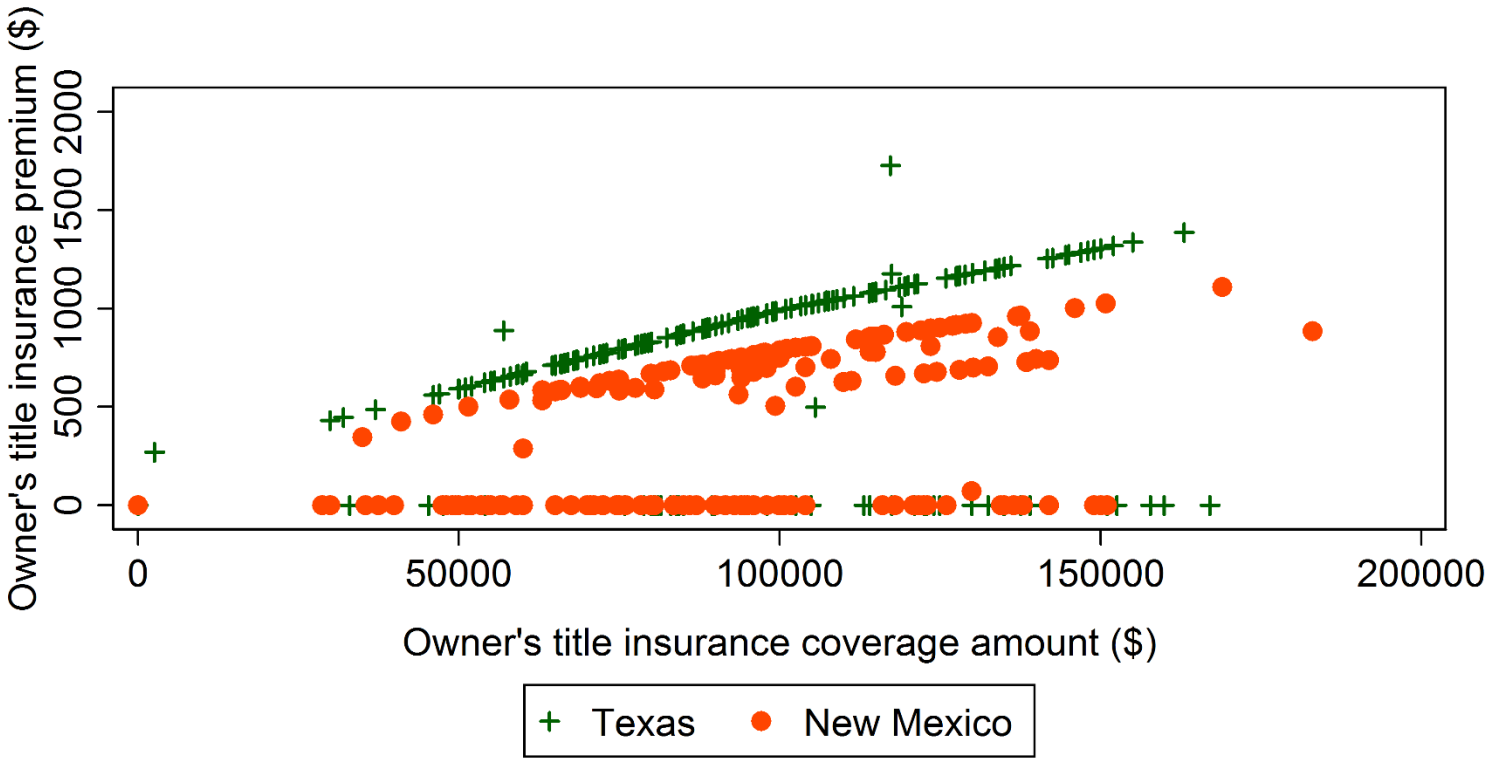
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.31 Comparison of Owner's Premium Between Texas and New Jersey



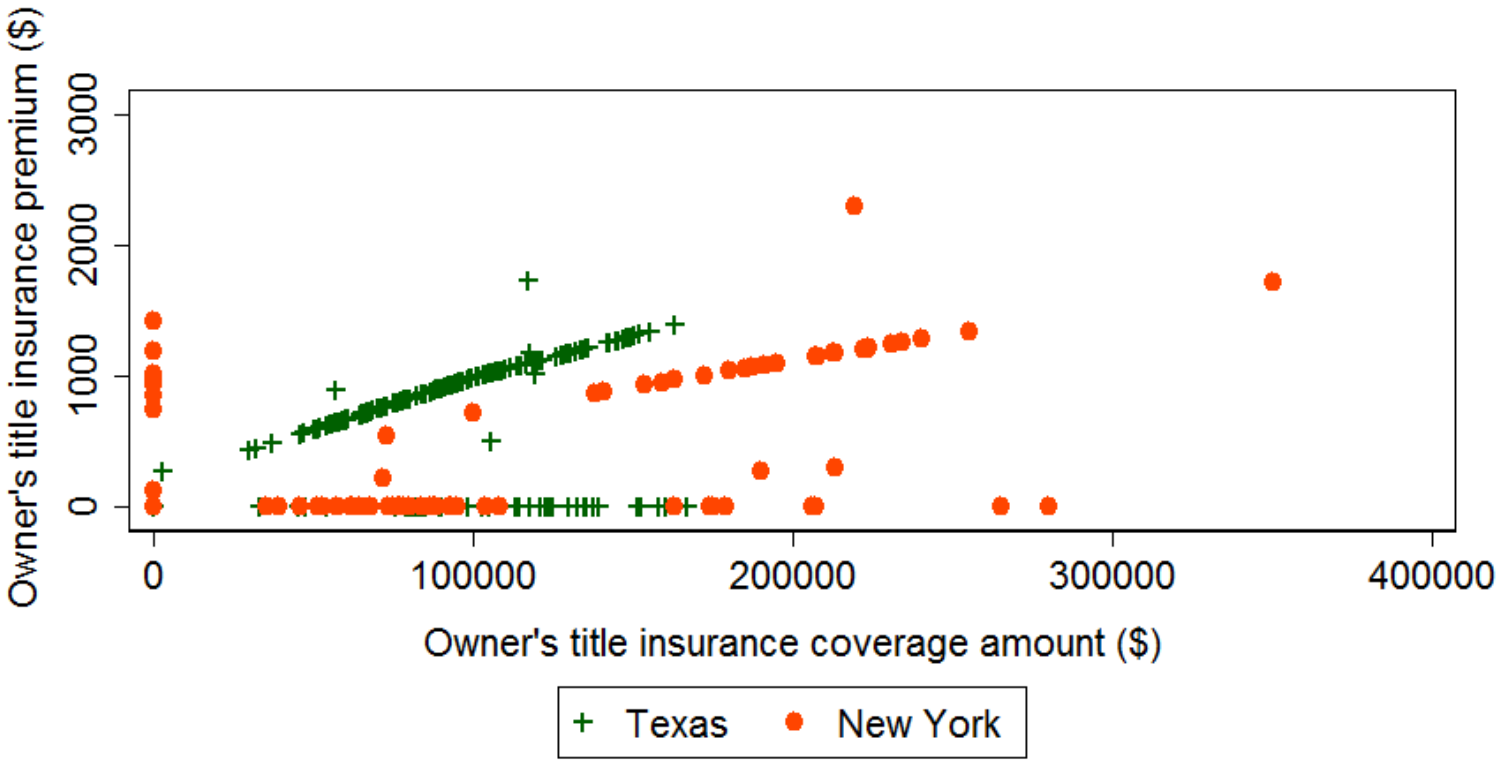
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.32 Comparison of Owner's Premium Between Texas and New Mexico



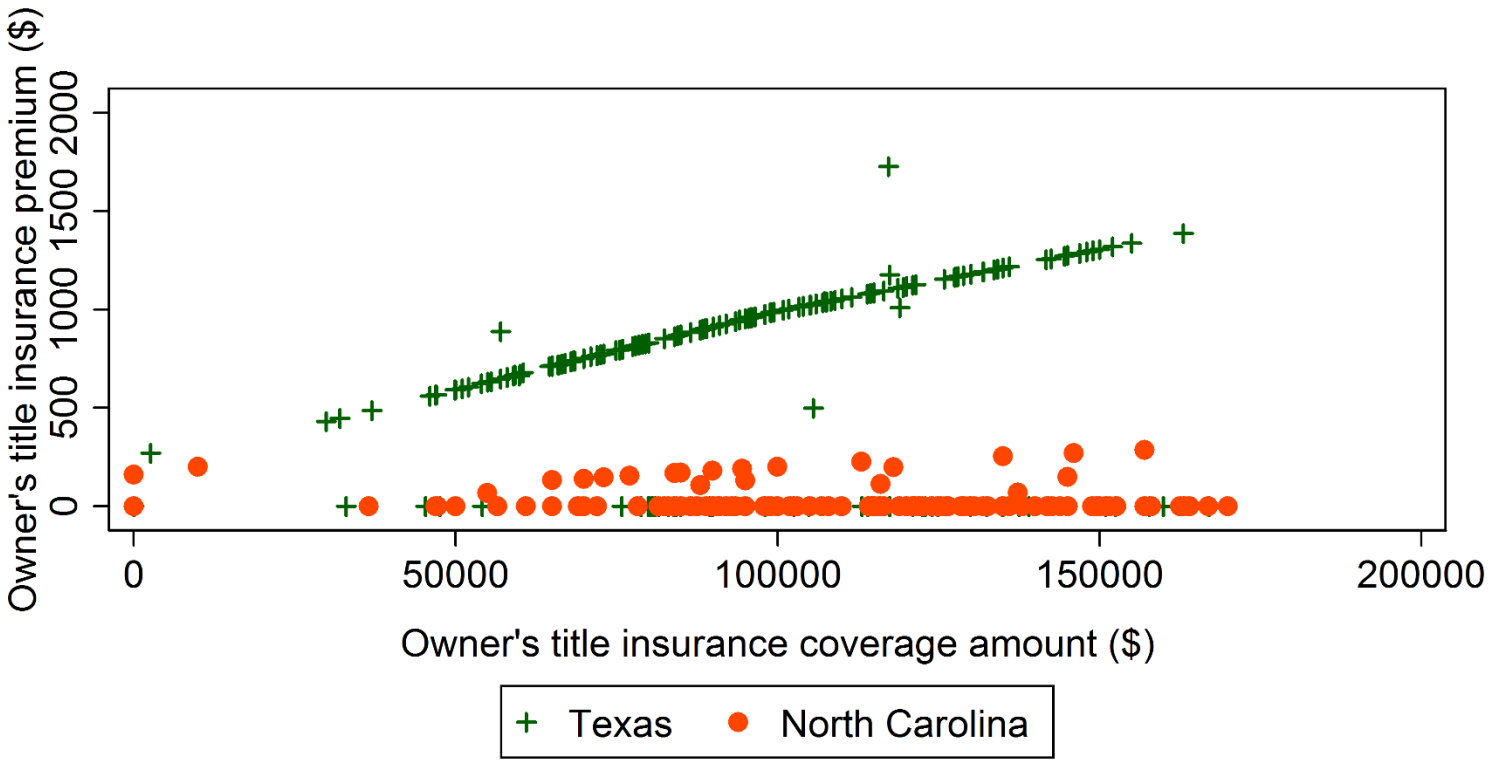
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.33 Comparison of Owner's Premium Between Texas and New York



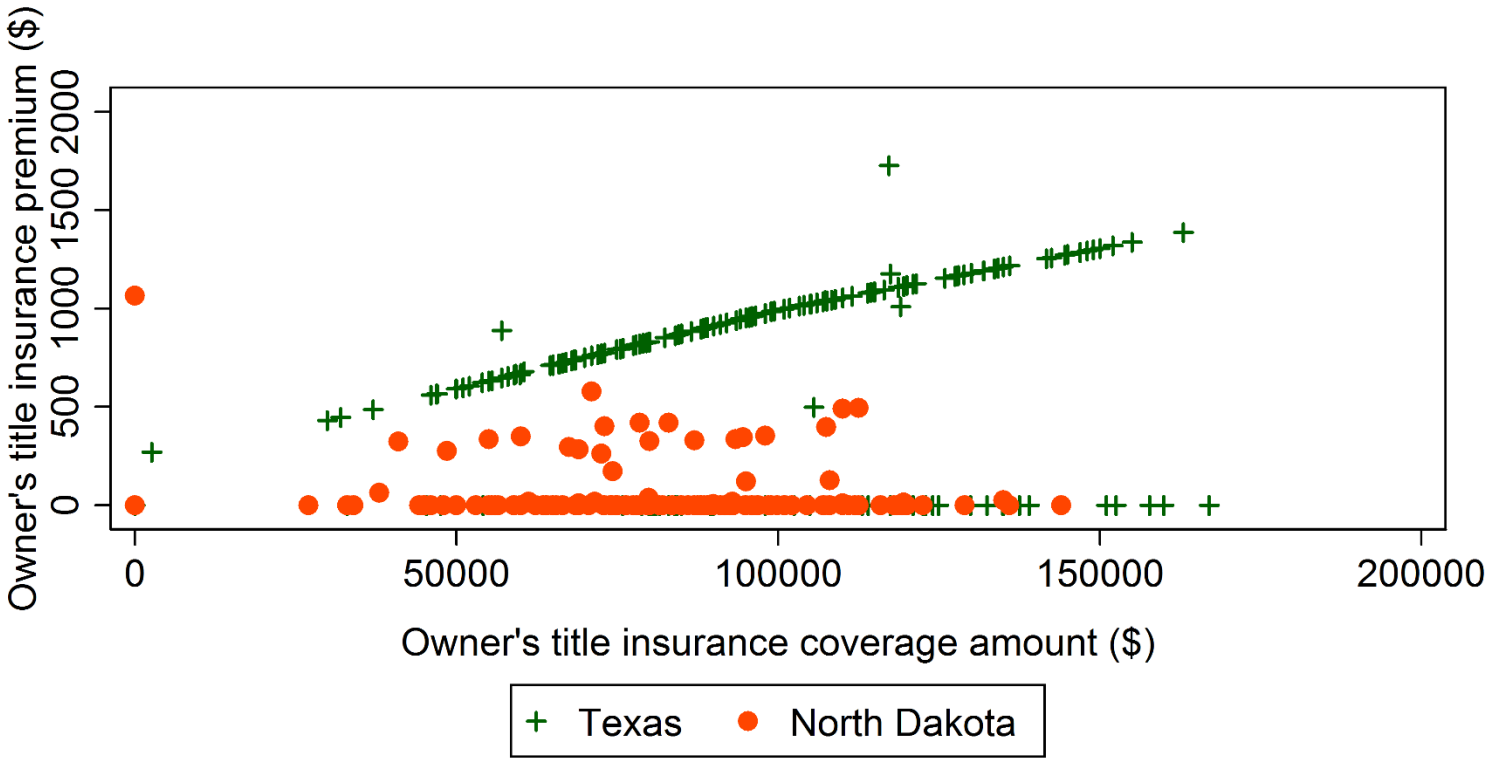
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.34 Comparison of Owner's Premium Between Texas and North Carolin



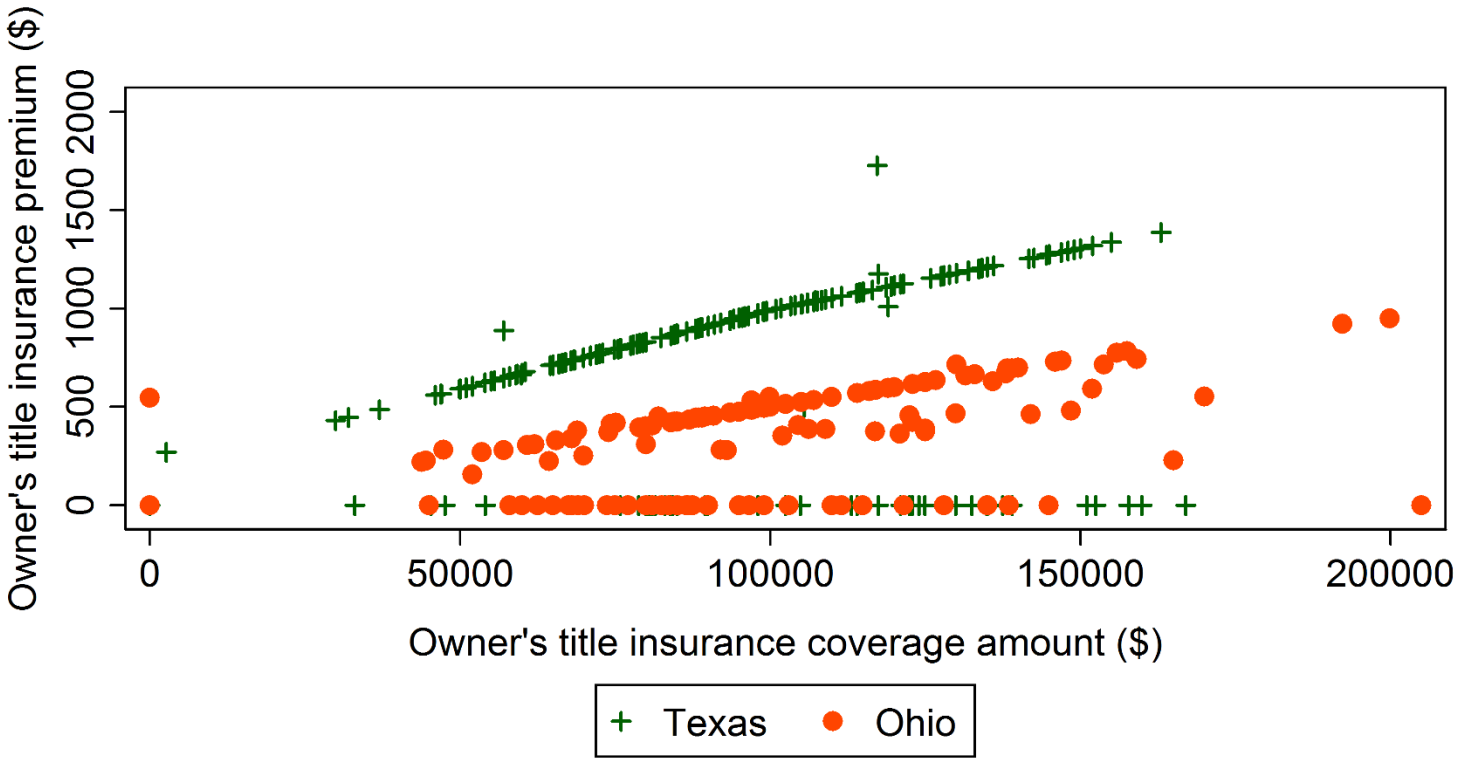
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.35 Comparison of Owner's Premium Between Texas and North Dakota



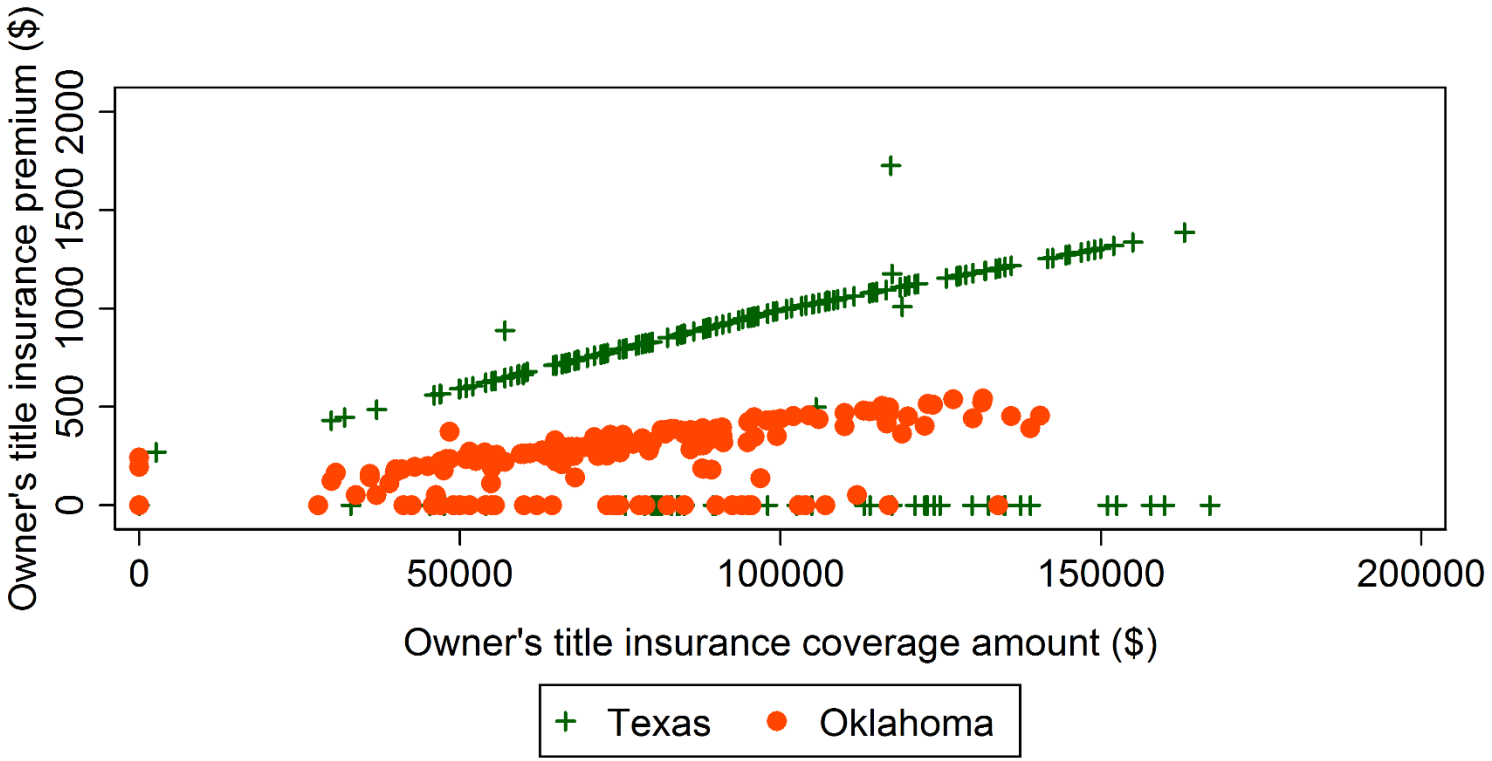
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.36 Comparison of Owner's Premium Between Texas and Ohio



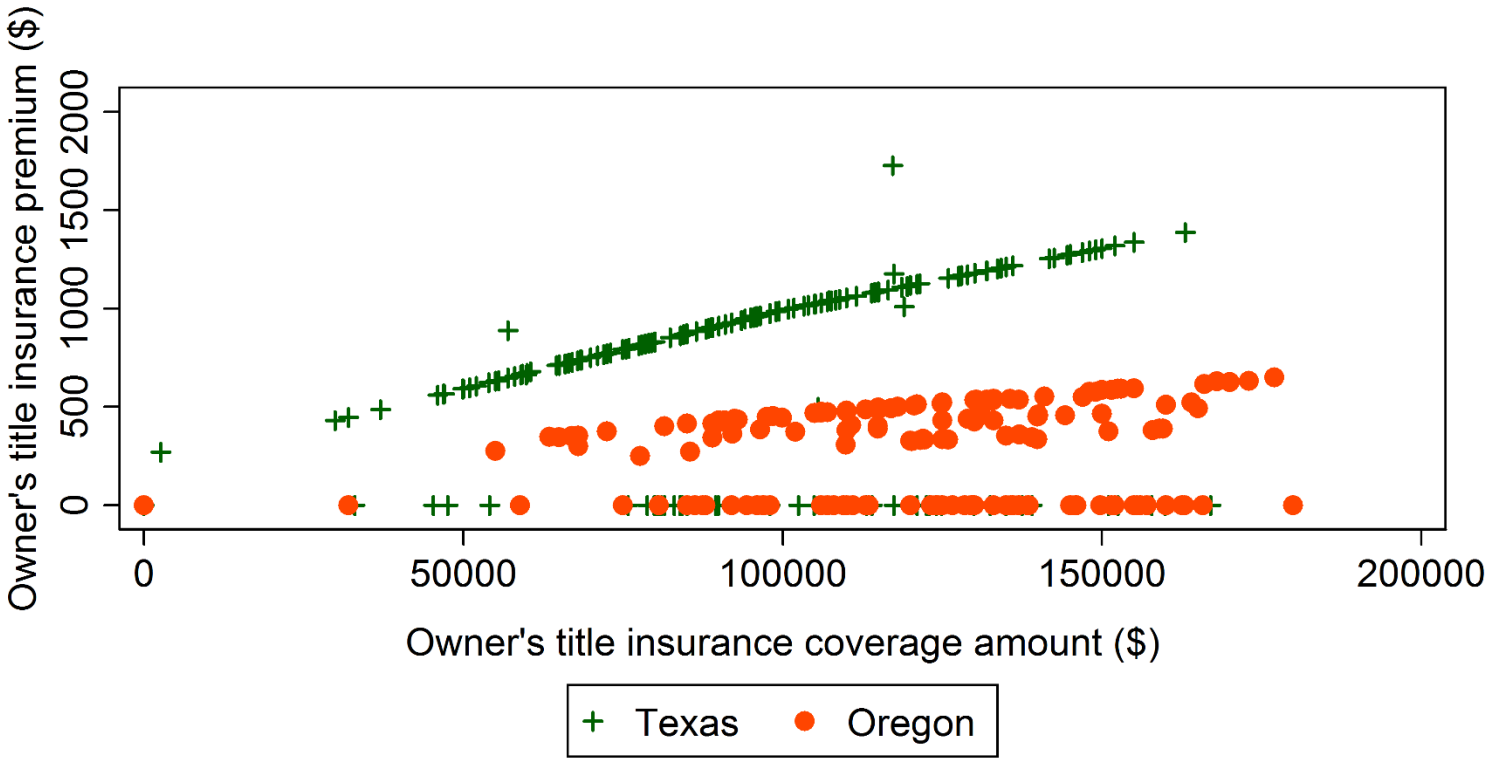
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.37 Comparison of Owner's Premium Between Texas and Oklahoma



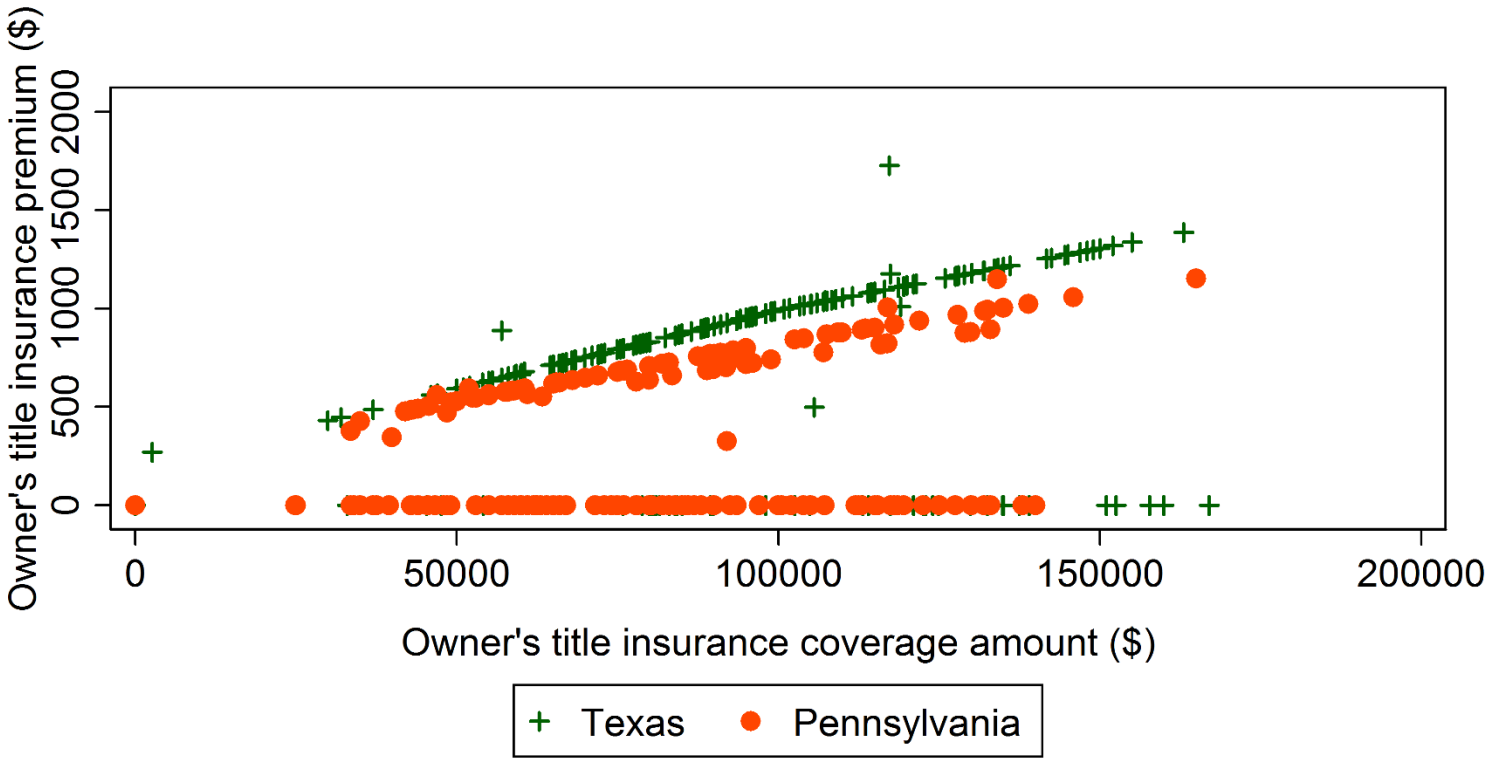
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.38 Comparison of Owner's Premium Between Texas and Oregon



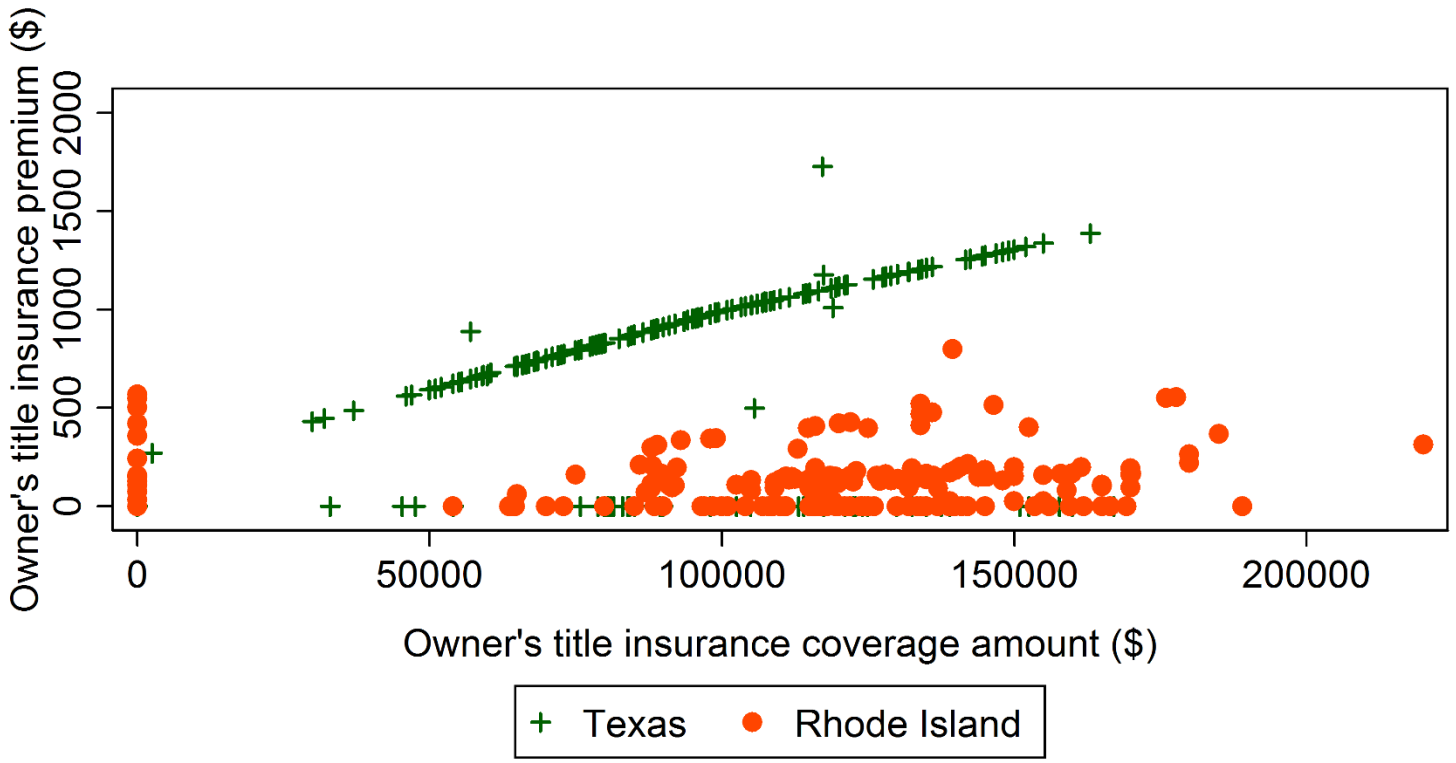
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.39 Comparison of Owner's Premium Between Texas and Pennsylvania



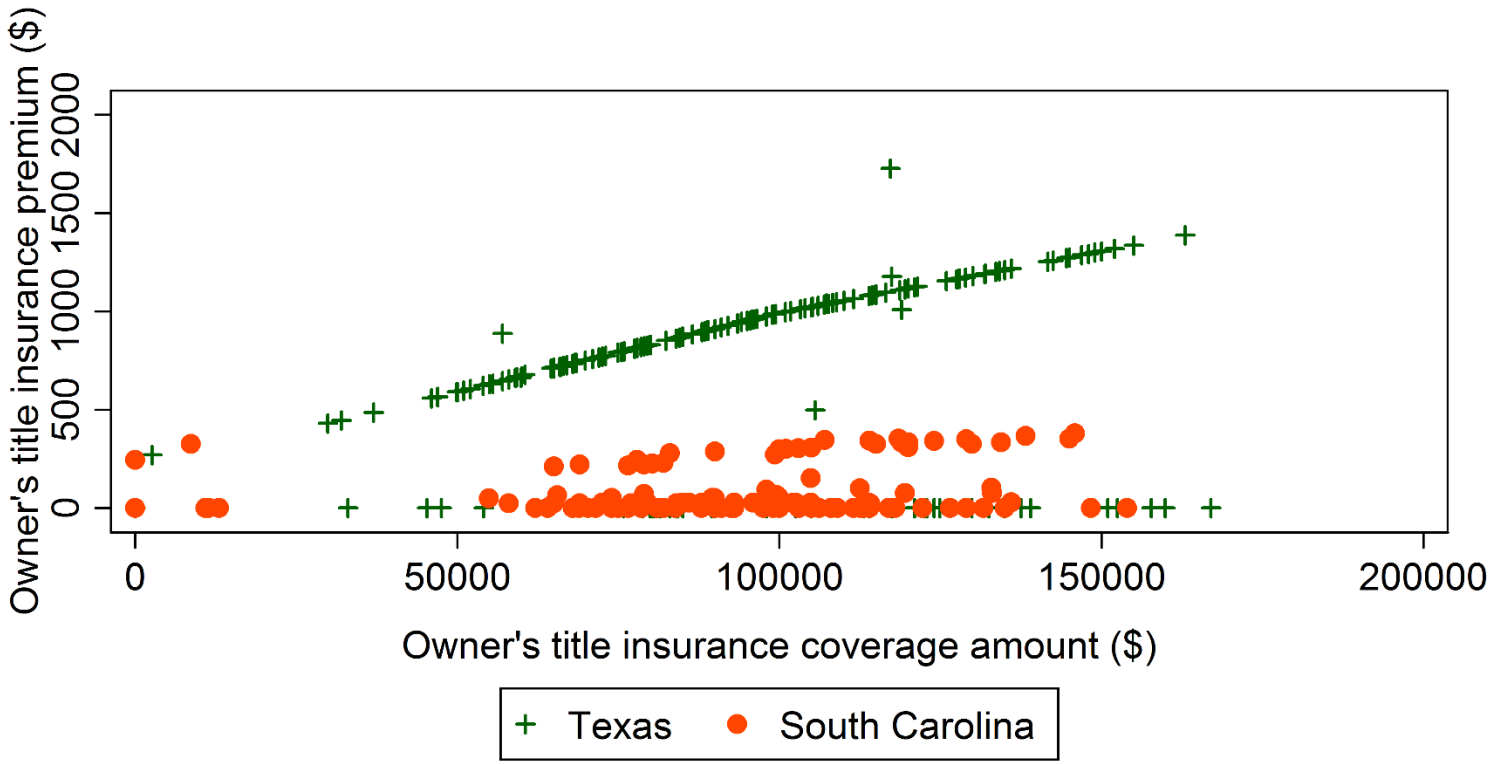
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.40 Comparison of Owner's Premium Between Texas and Rhode Islanc



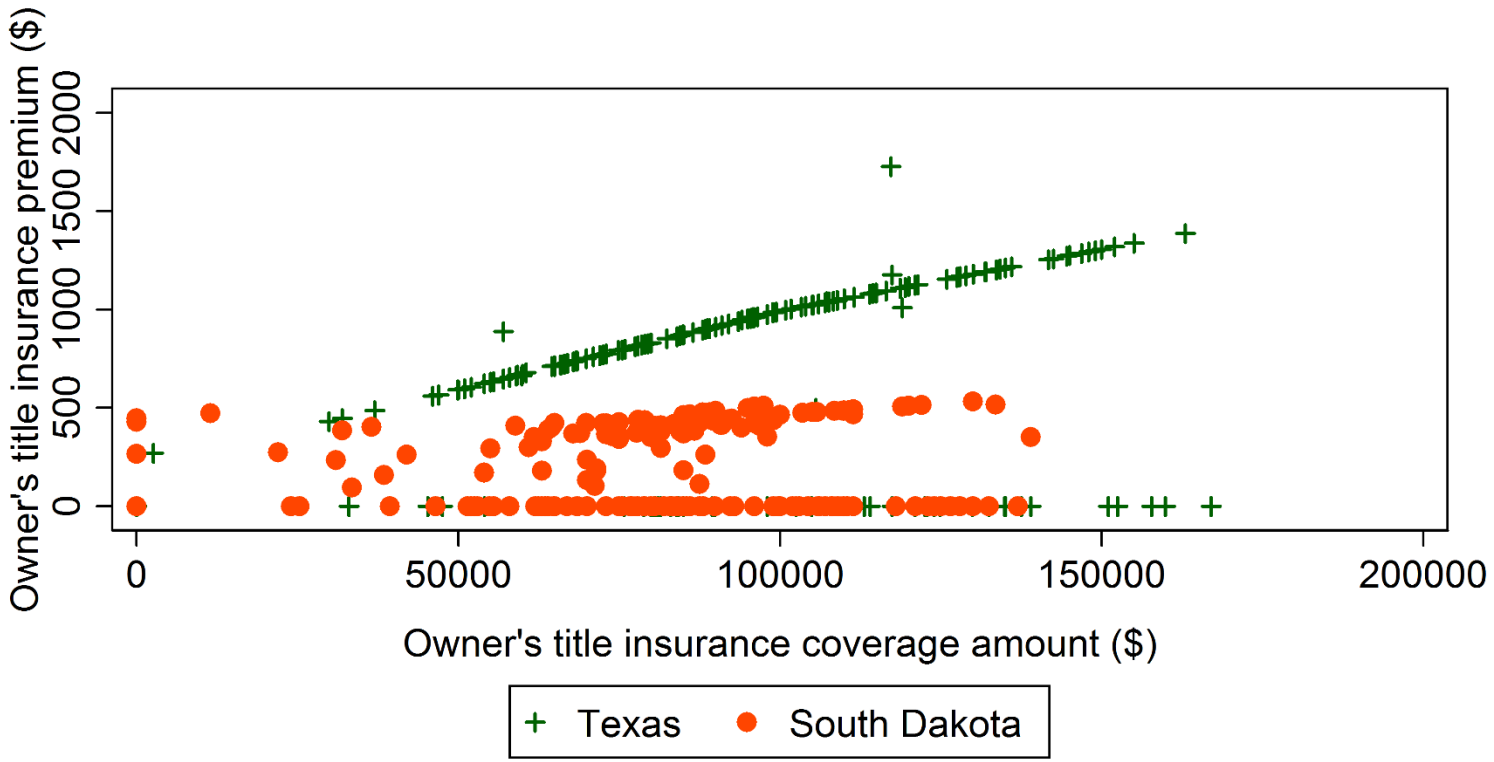
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.41 Comparison of Owner's Premium Between Texas and South Carolin



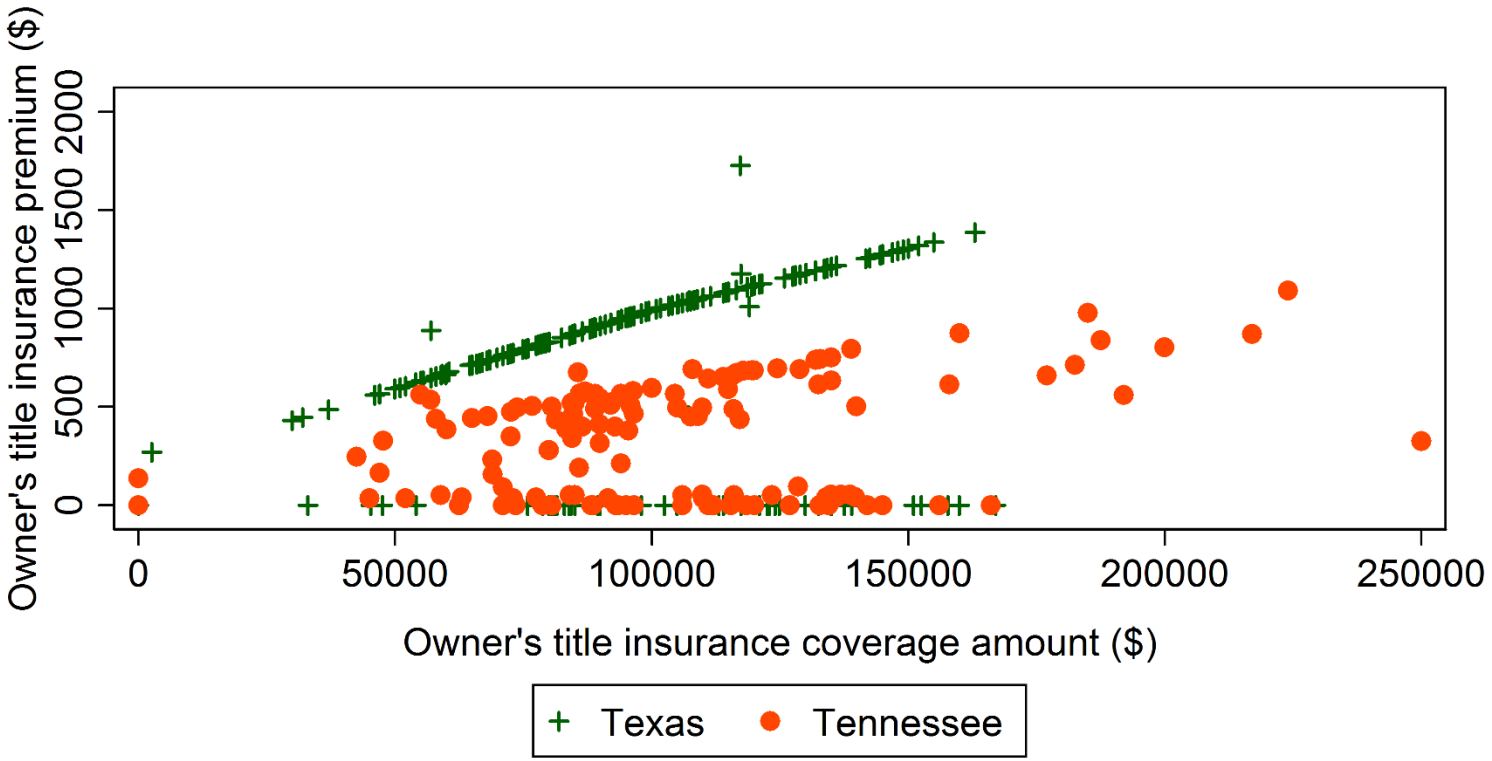
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.42 Comparison of Owner's Premium Between Texas and South Dakota



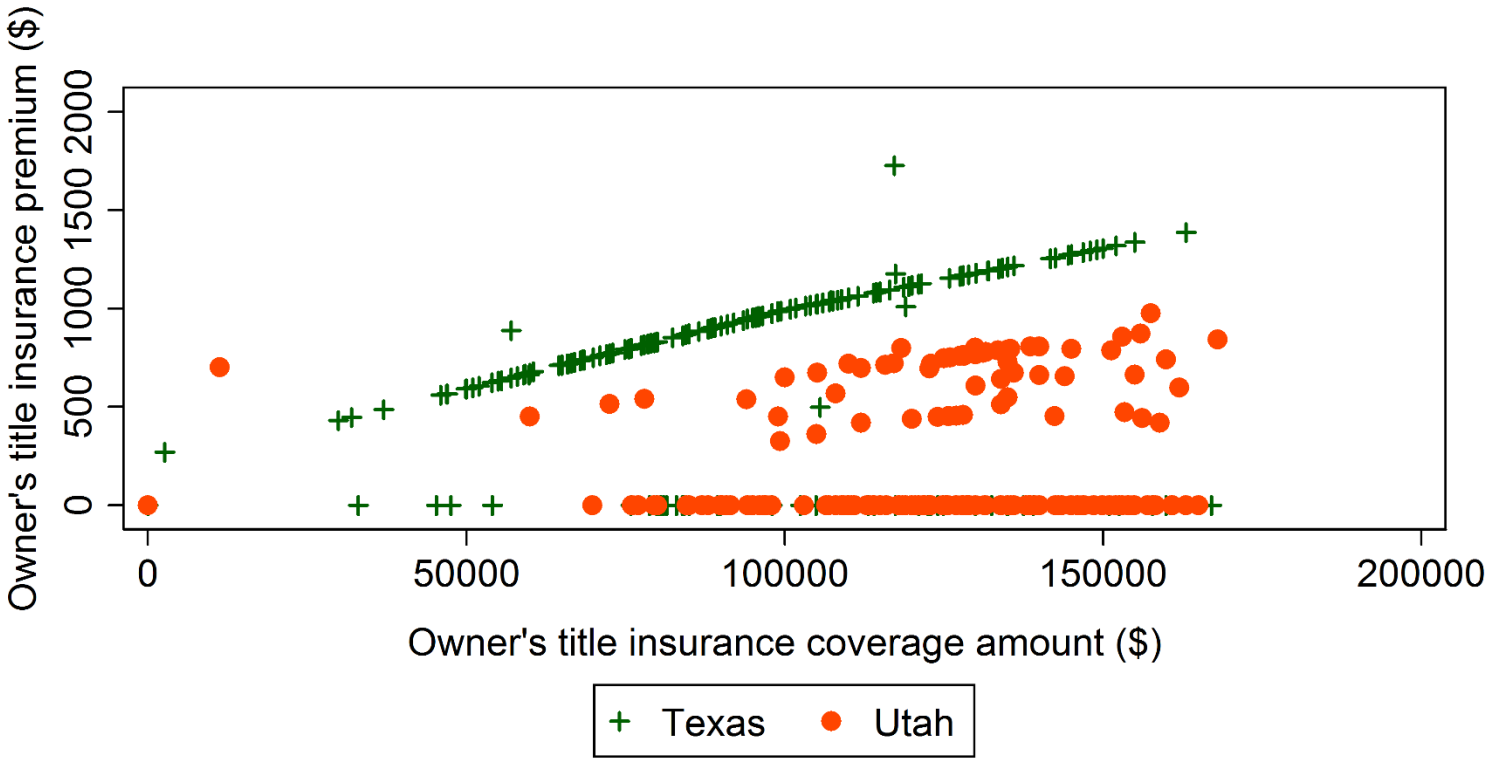
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.43 Comparison of Owner's Premium Between Texas and Tennessee



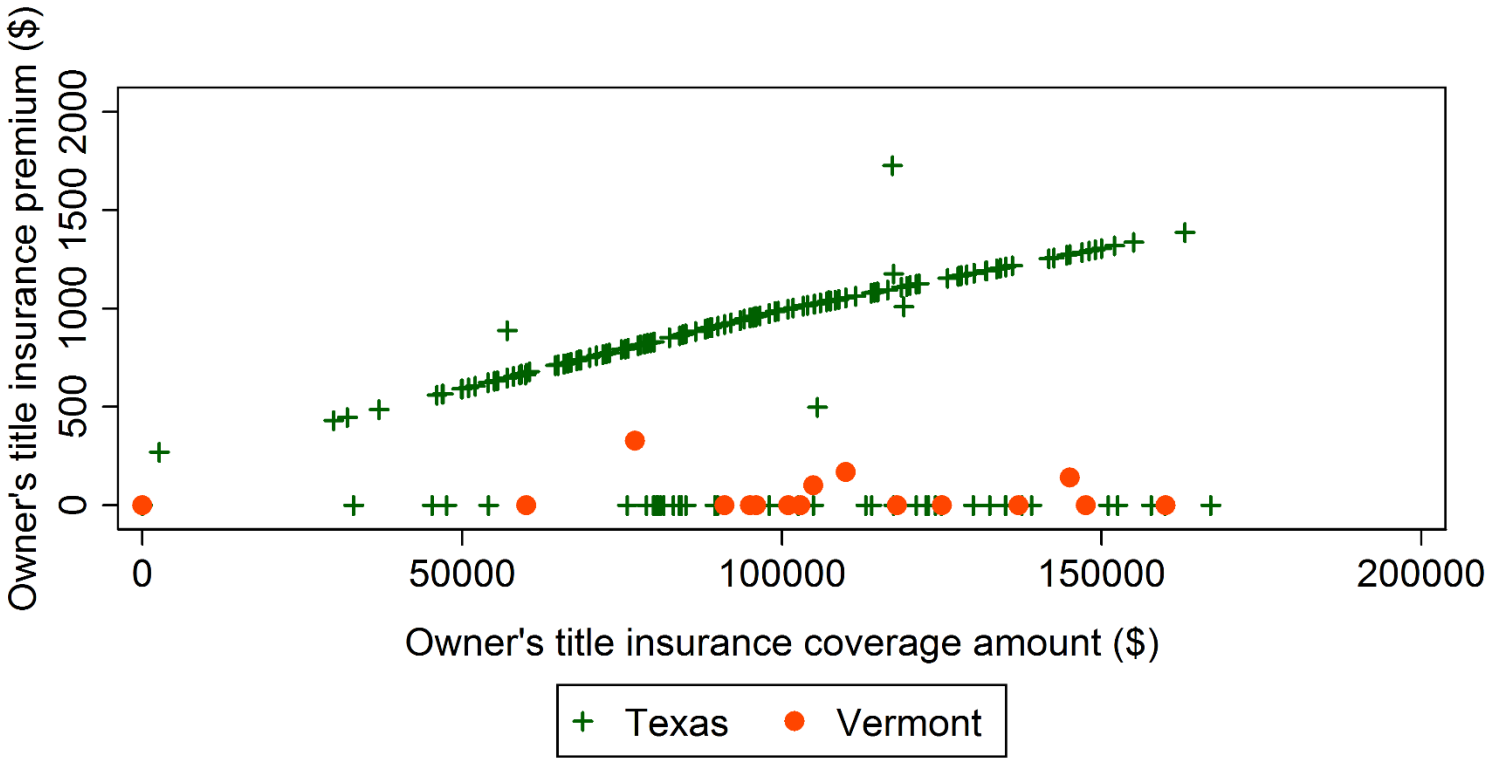
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.44 Comparison of Owner's Premium Between Texas and Utah



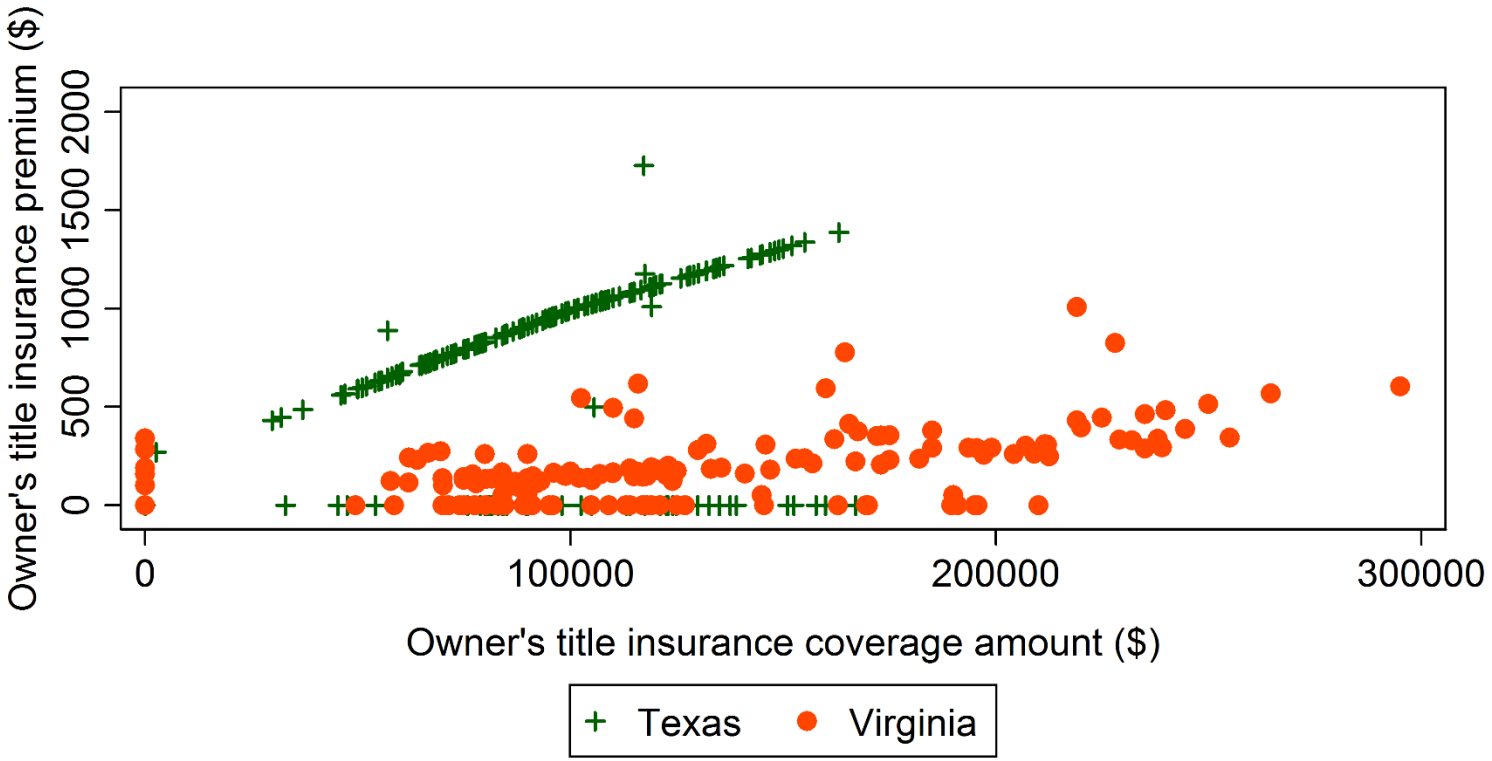
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.45 Comparison of Owner's Premium Between Texas and Vermont



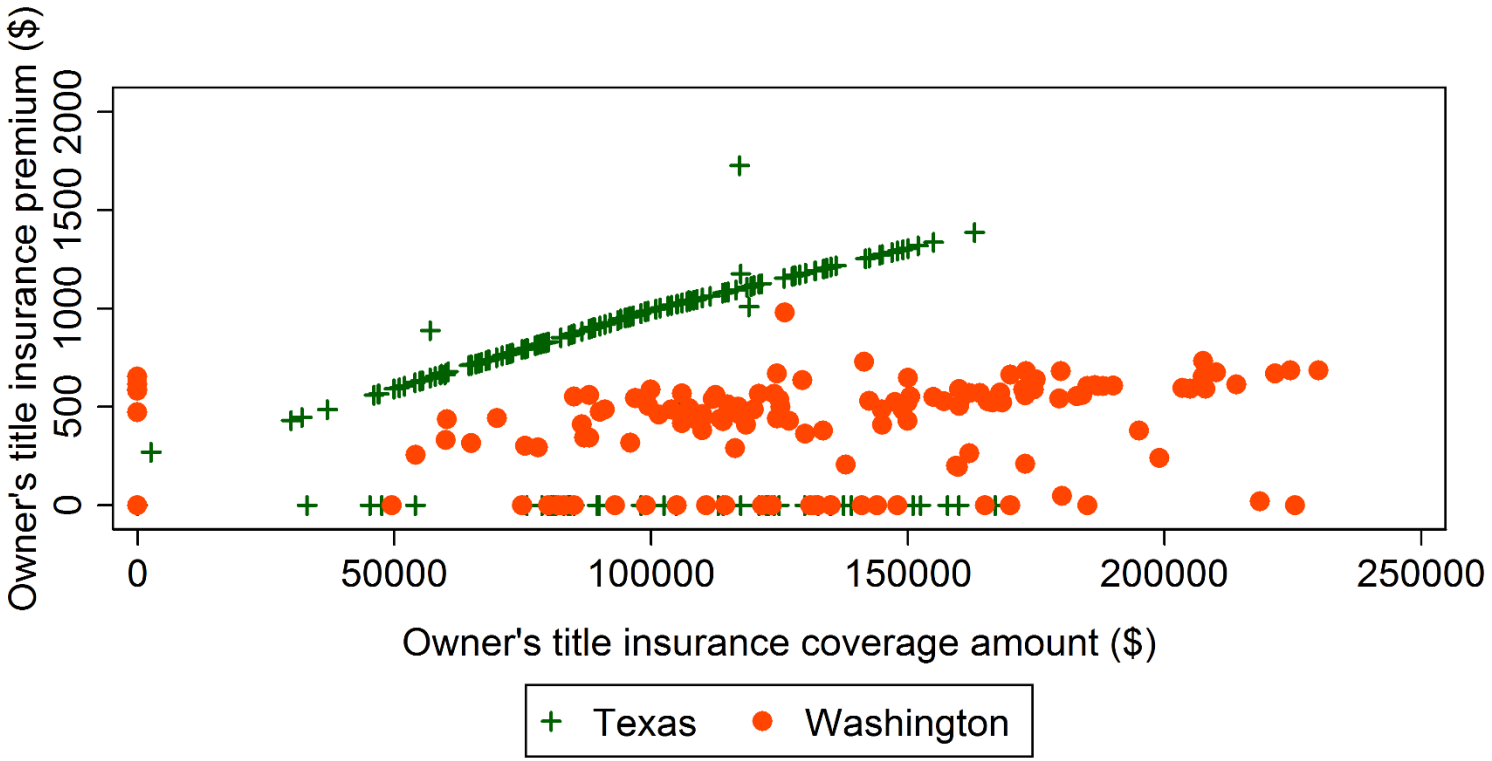
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.46 Comparison of Owner's Premium Between Texas and Virginia



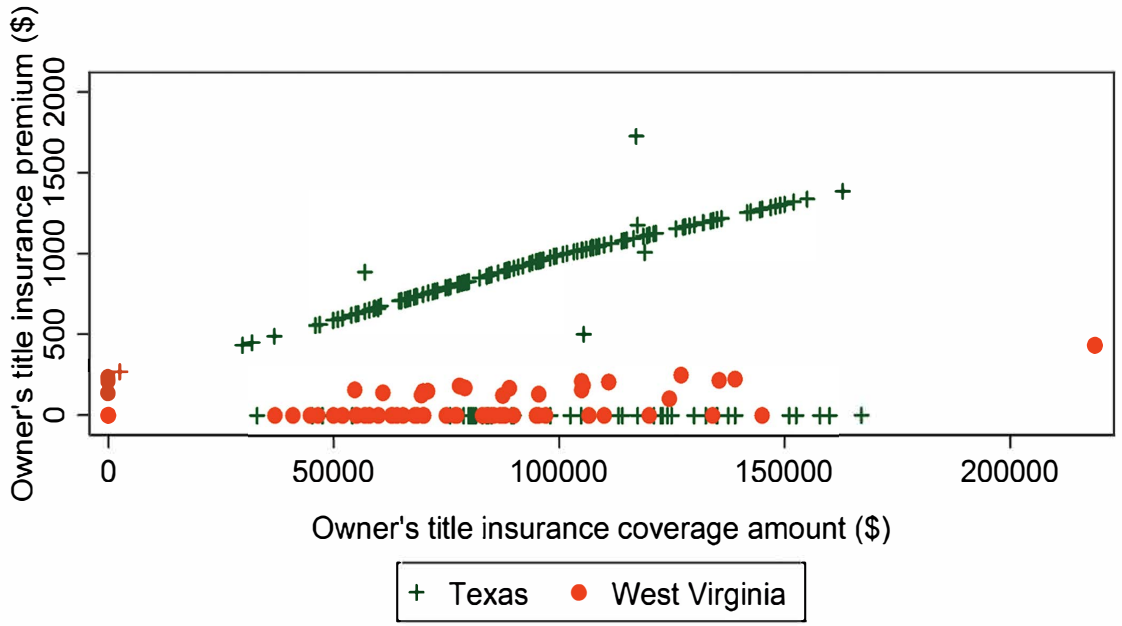
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.47 Comparison of Owner's Premium Between Texas and Washington



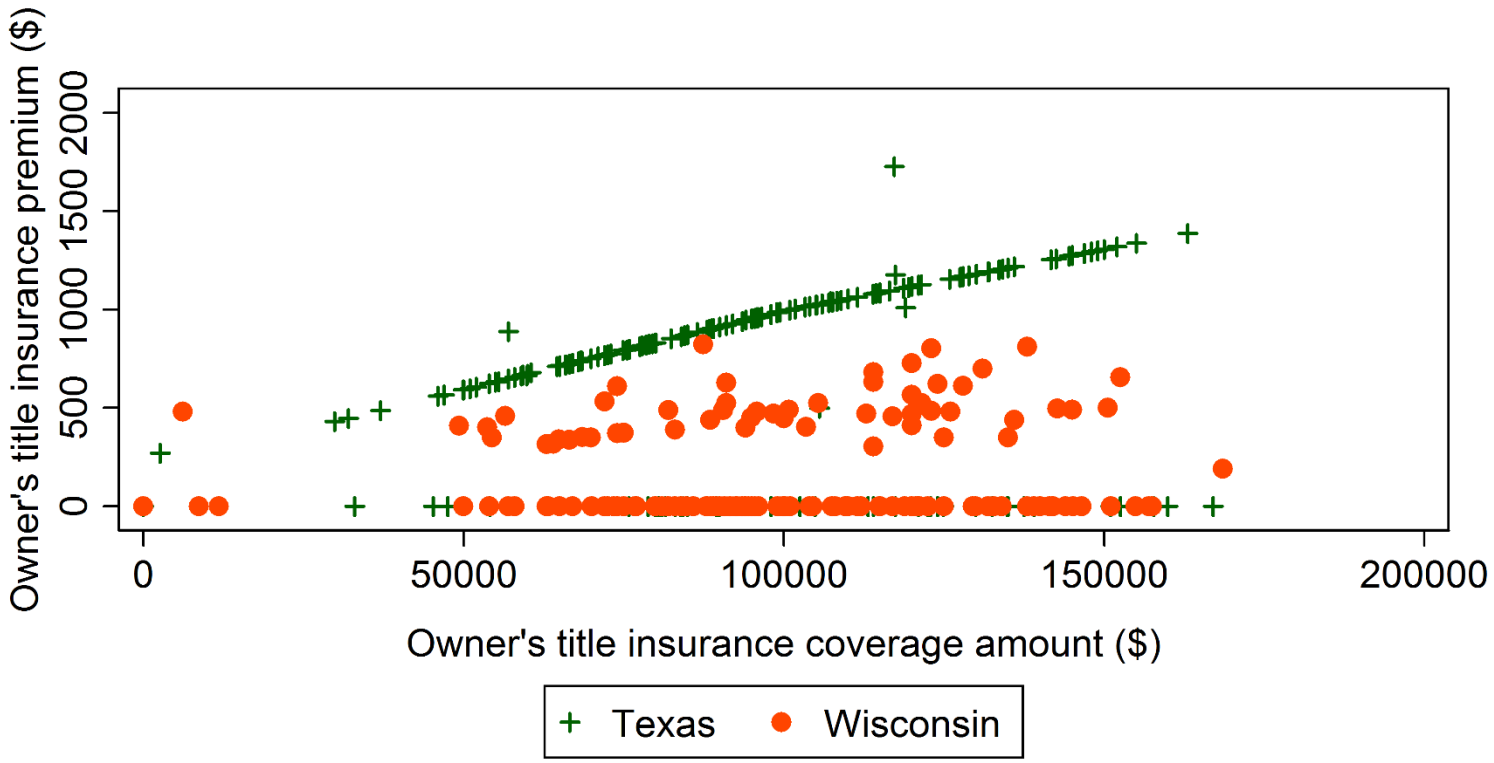
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.48 Comparison of Owner's Premium Between Texas and West Virginia



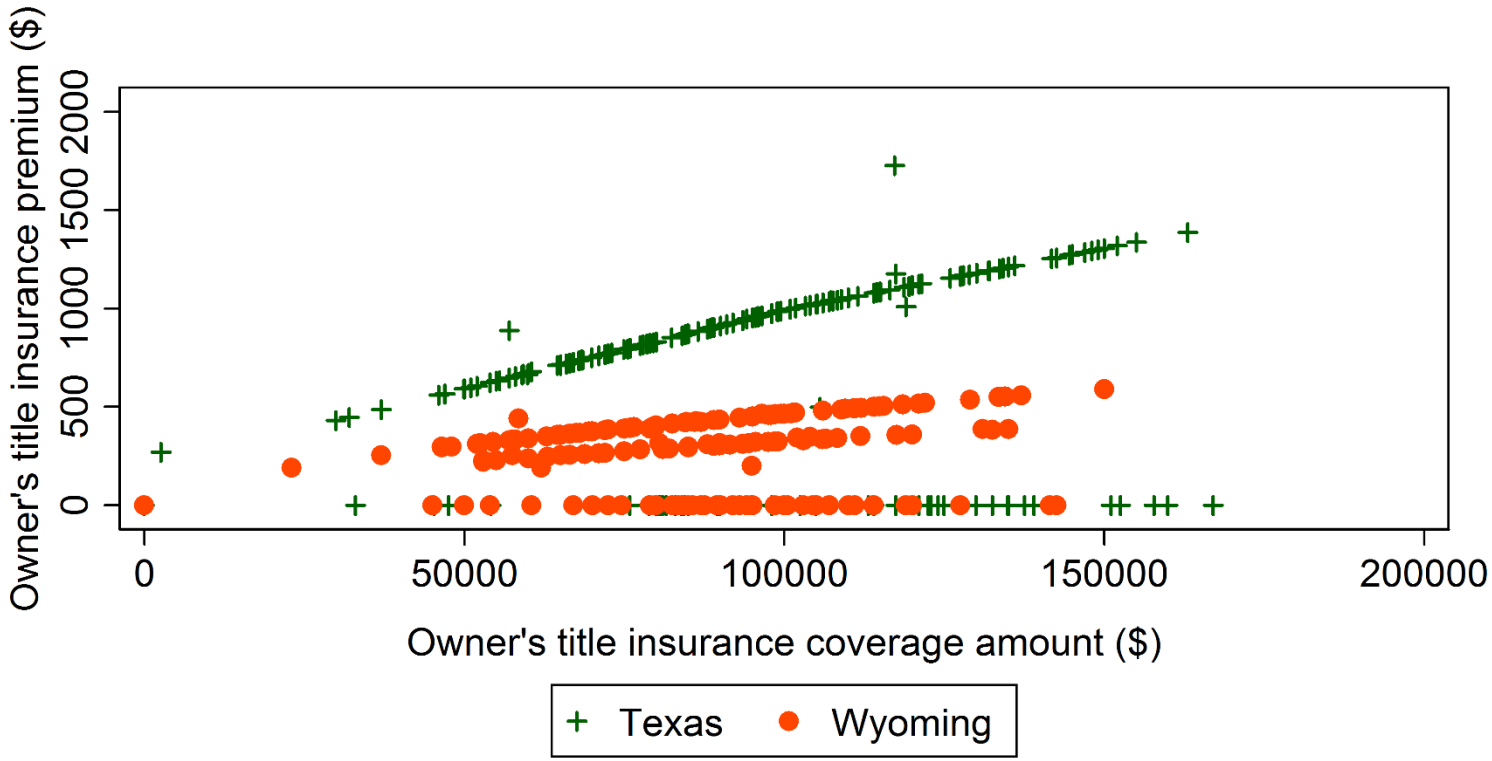
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.49 Comparison of Owner's Premium Between Texas and Wisconsin



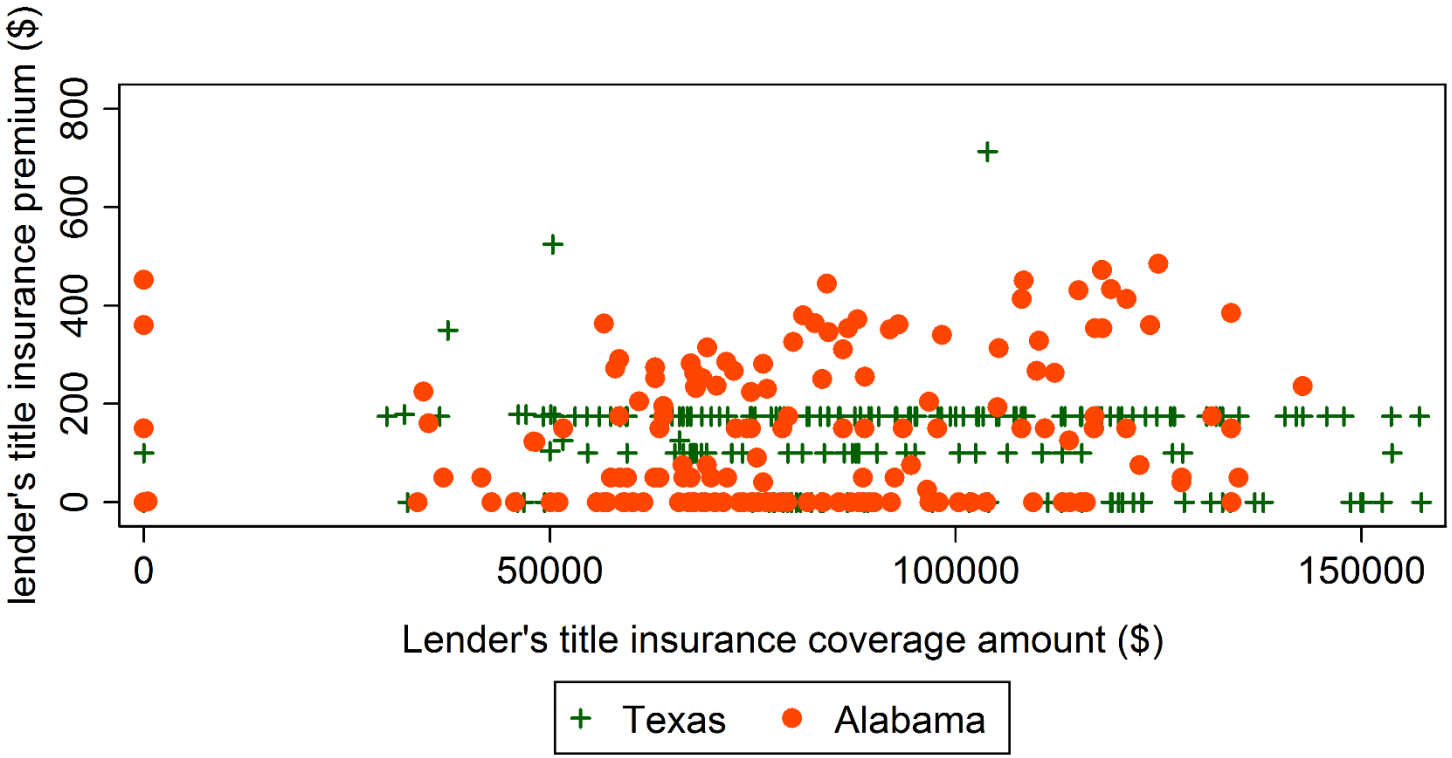
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.4.50 Comparison of Owner's Premium Between Texas and Wyoming



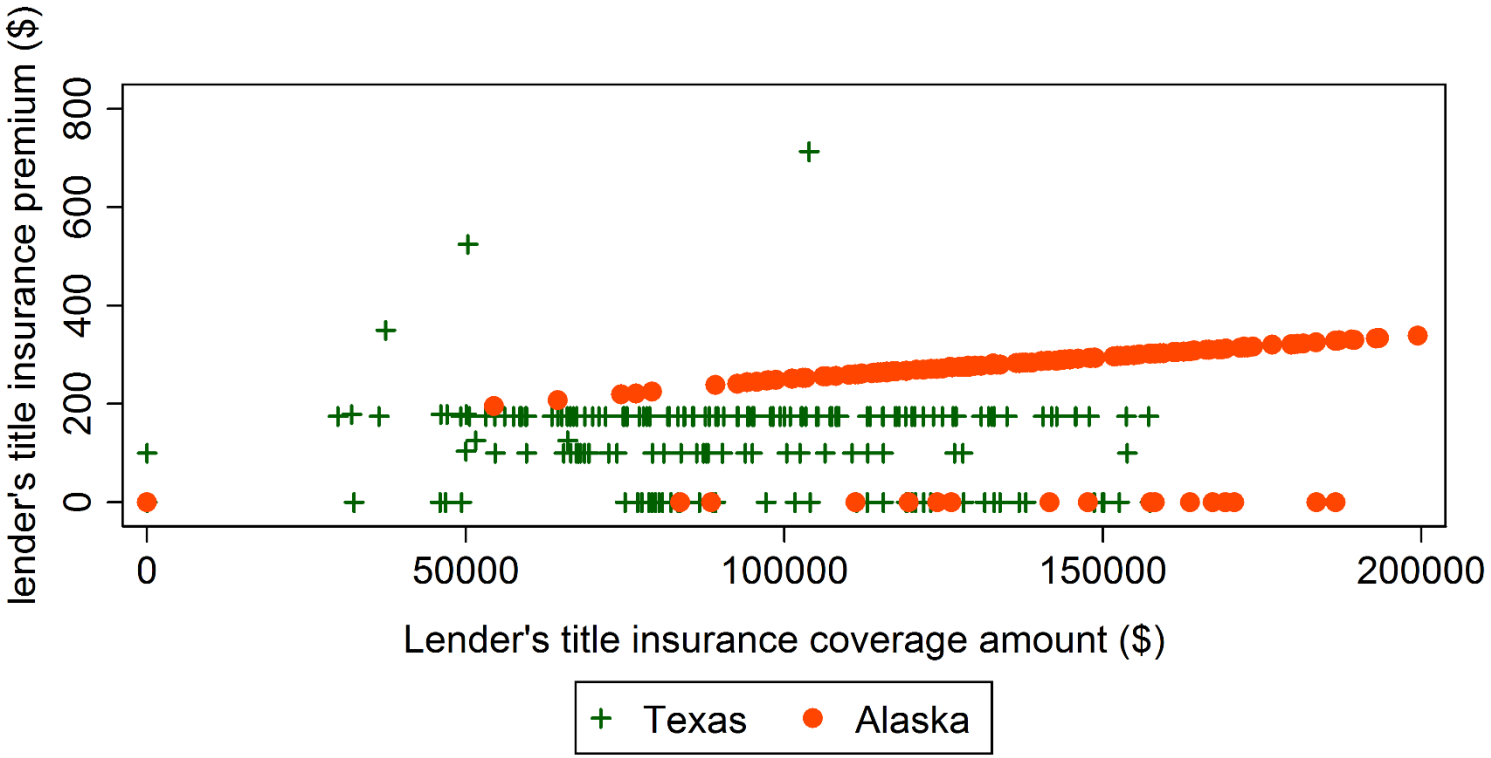
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.1 Comparison of Lender's Premium Between Texas and Alabama



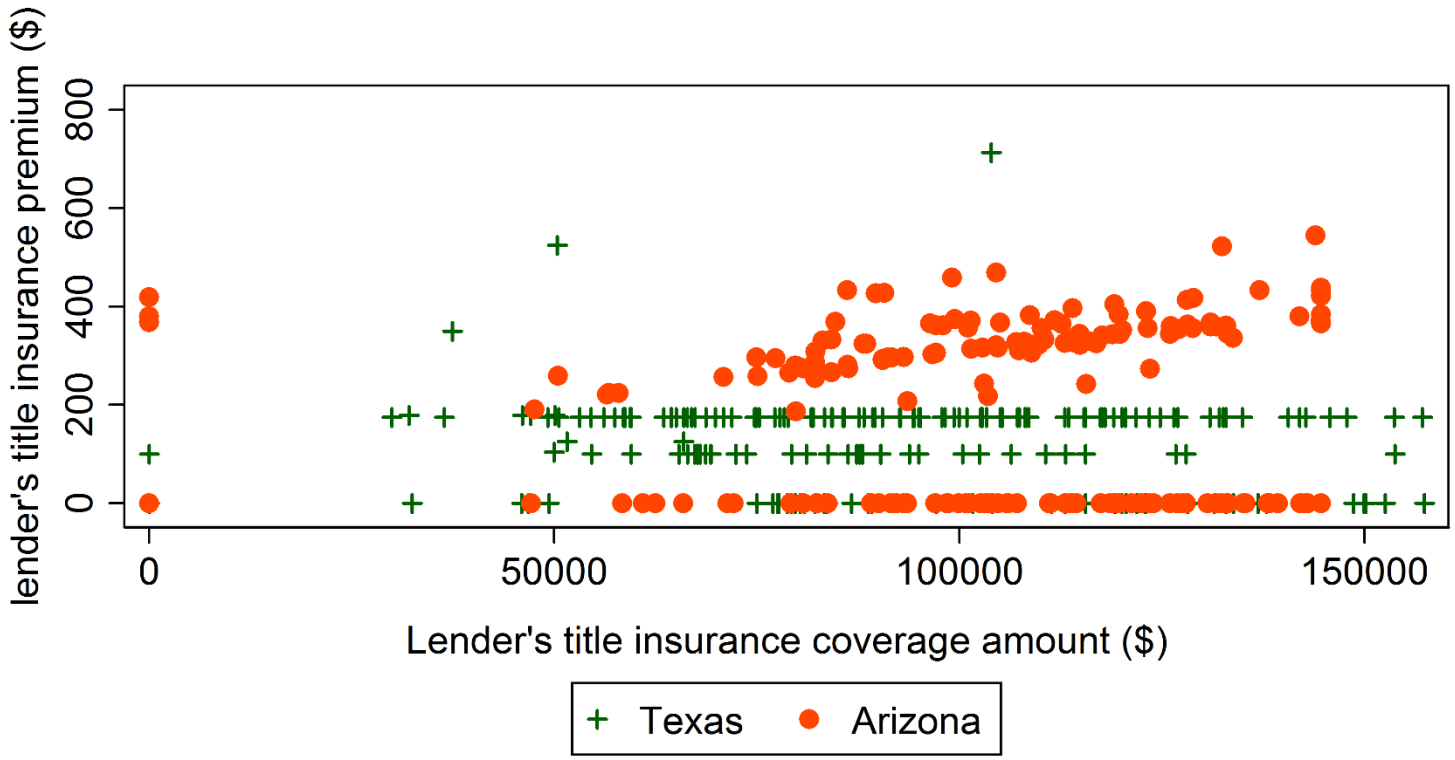
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.2 Comparison of Lender's Premium Between Texas and Alaska



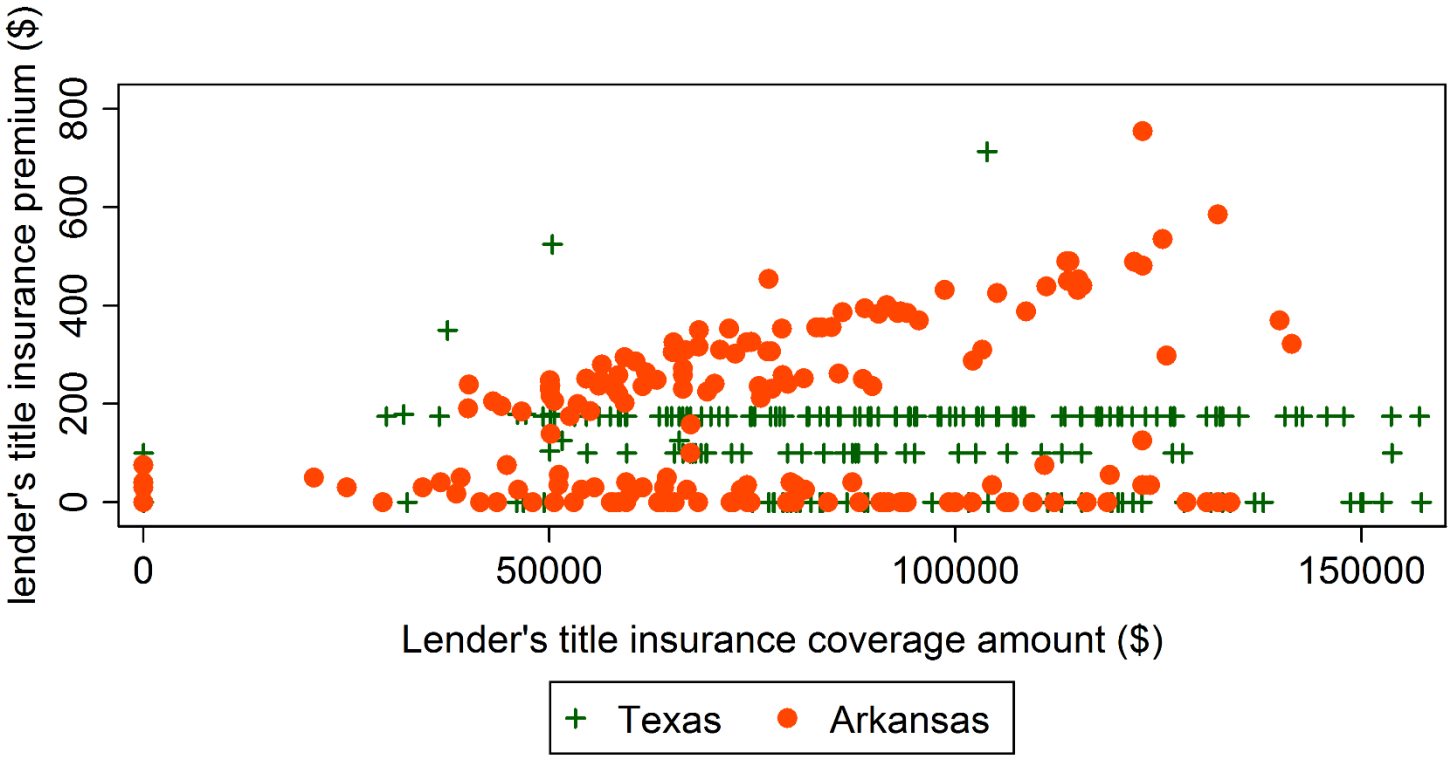
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.3 Comparison of Lender's Premium Between Texas and Arizona



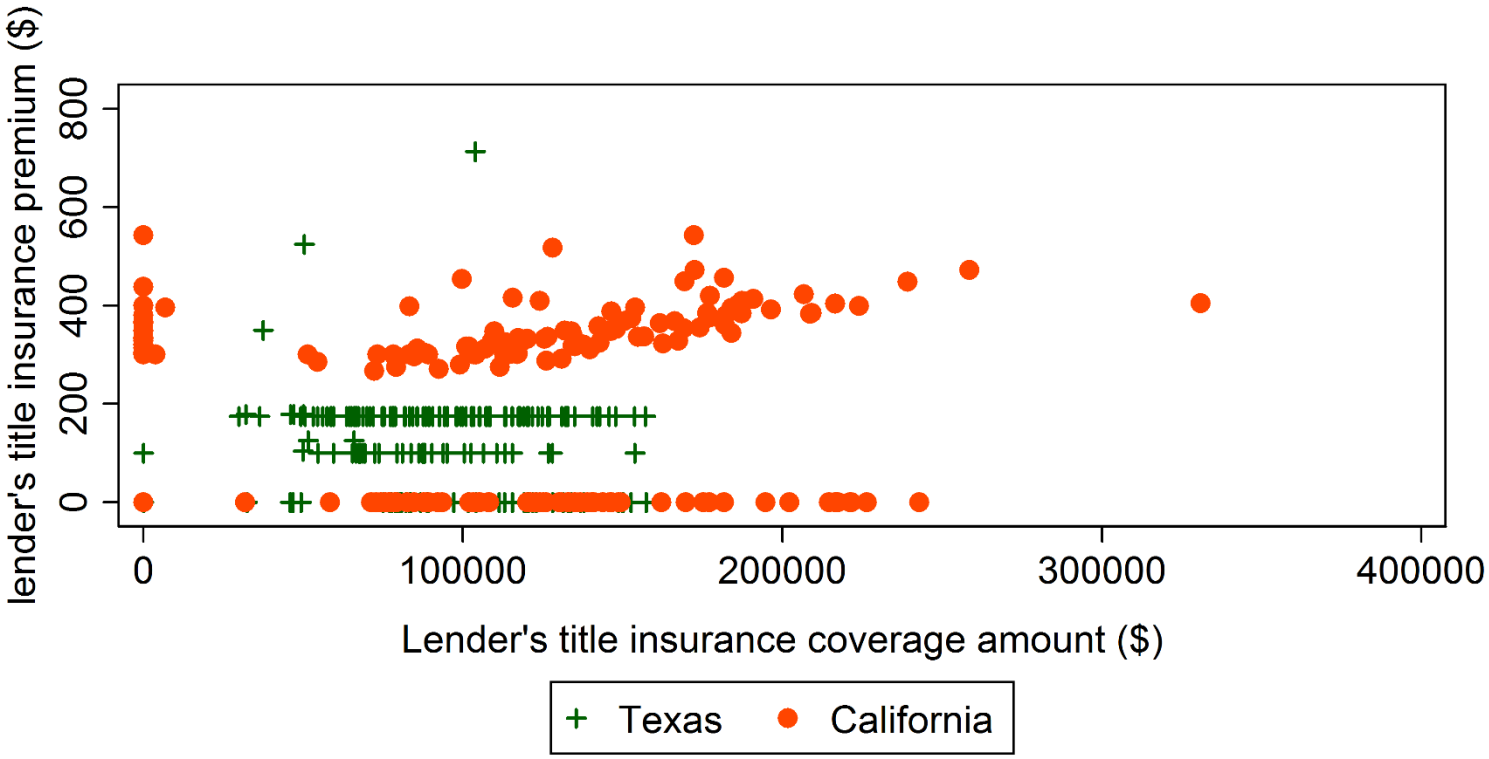
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.4 Comparison of Lender's Premium Between Texas and Arkansas



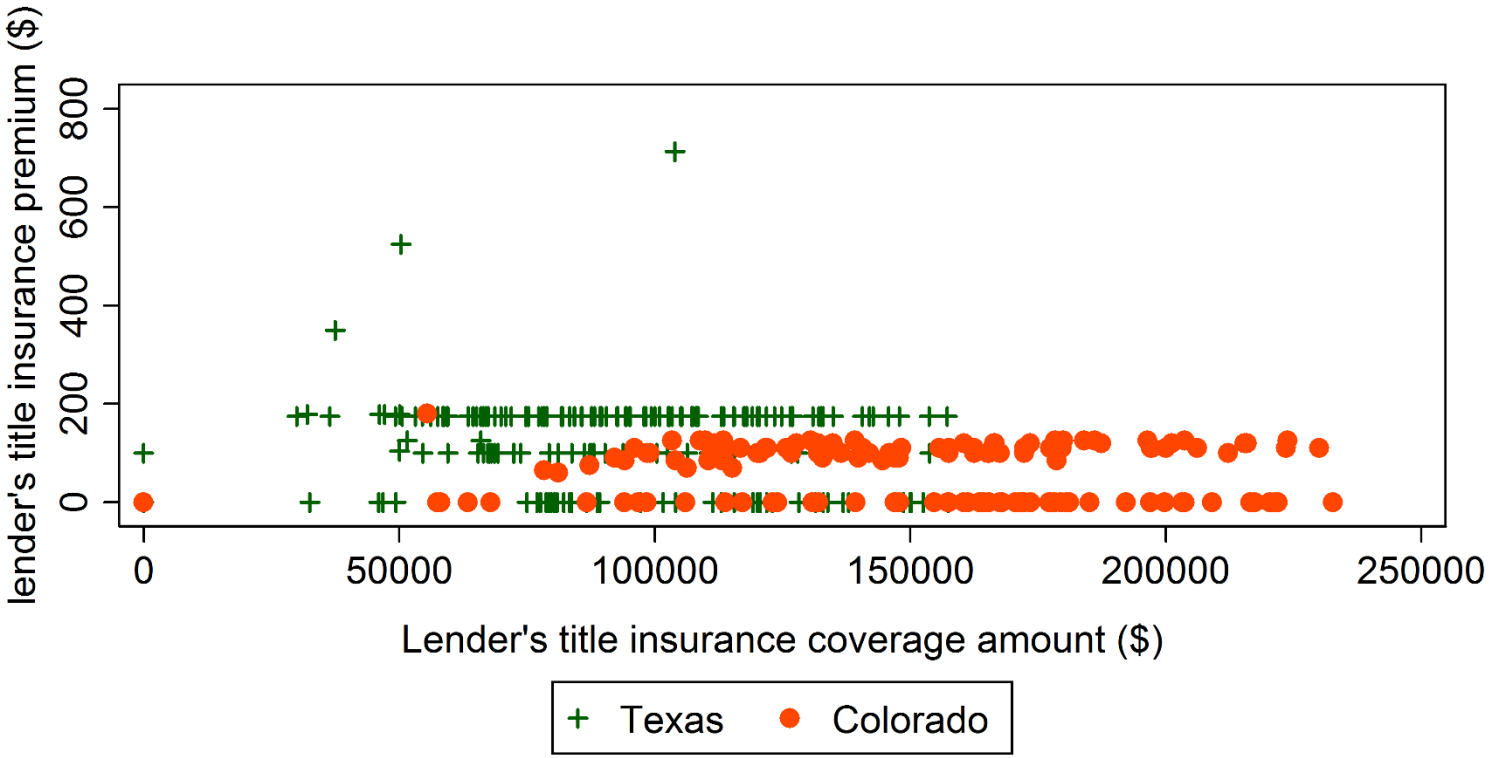
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.5 Comparison of Lender's Premium Between Texas and California



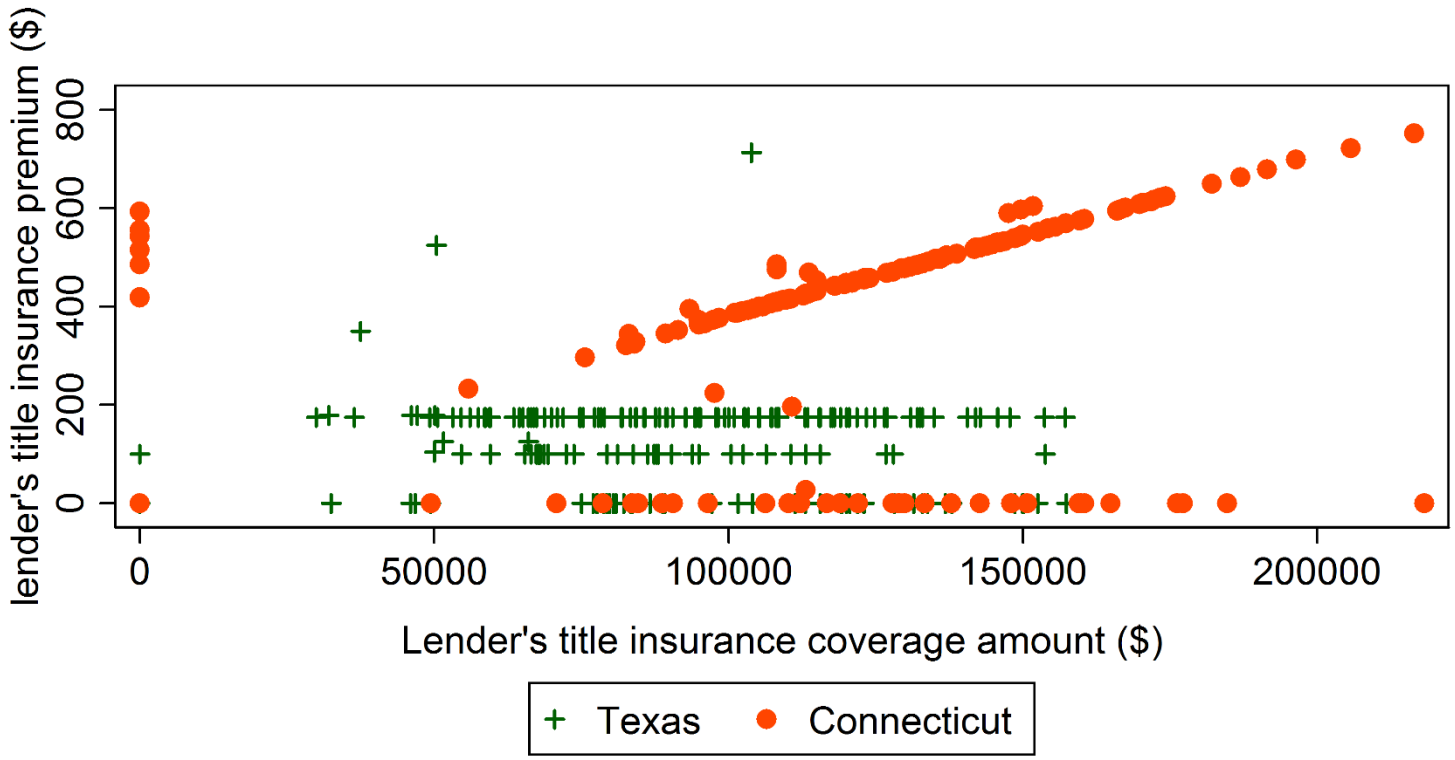
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.6 Comparison of Lender's Premium Between Texas and Colorado



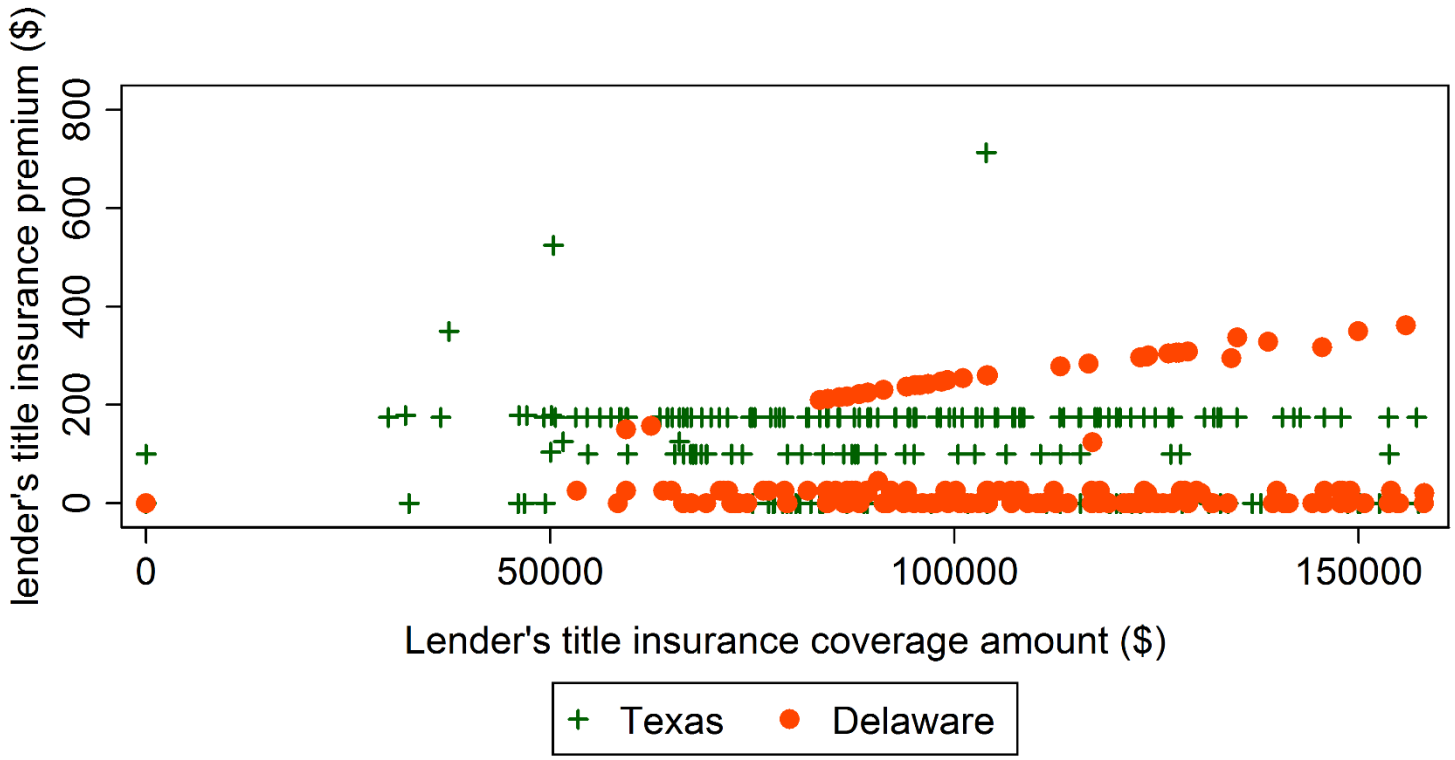
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.7 Comparison of Lender's Premium Between Texas and Connecticut



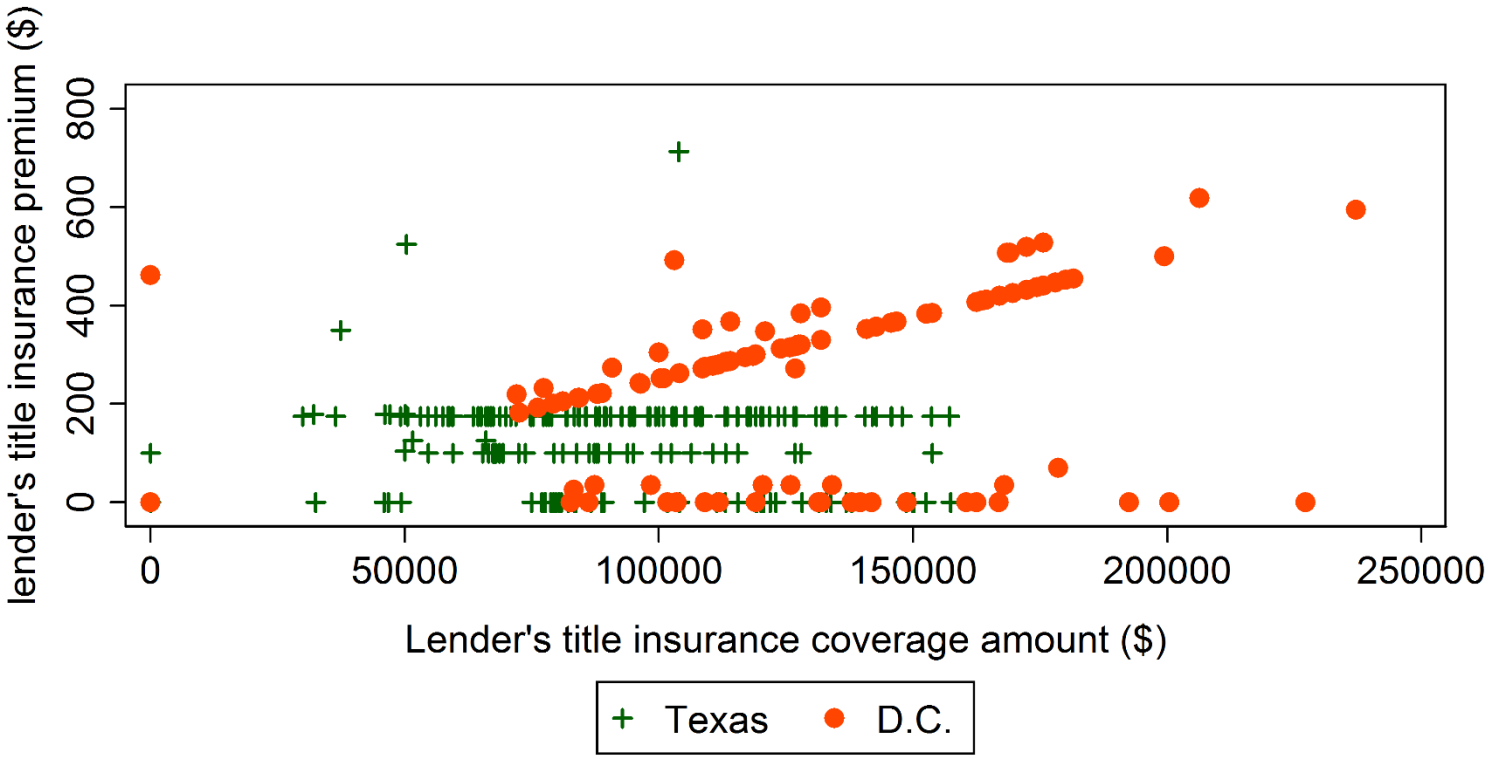
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.8 Comparison of Lender's Premium Between Texas and Delaware



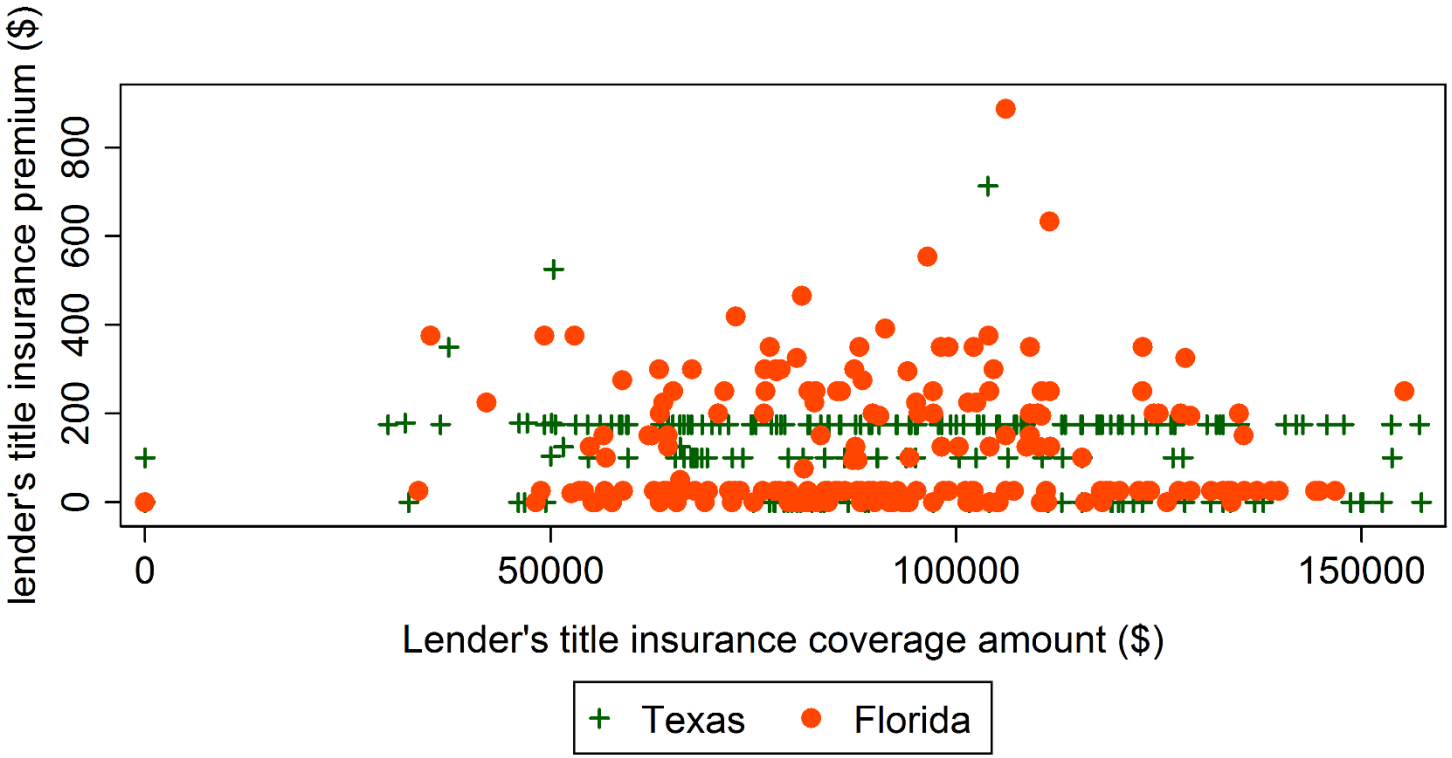
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.9 Comparison of Lender's Premium Between Texas and D.C.



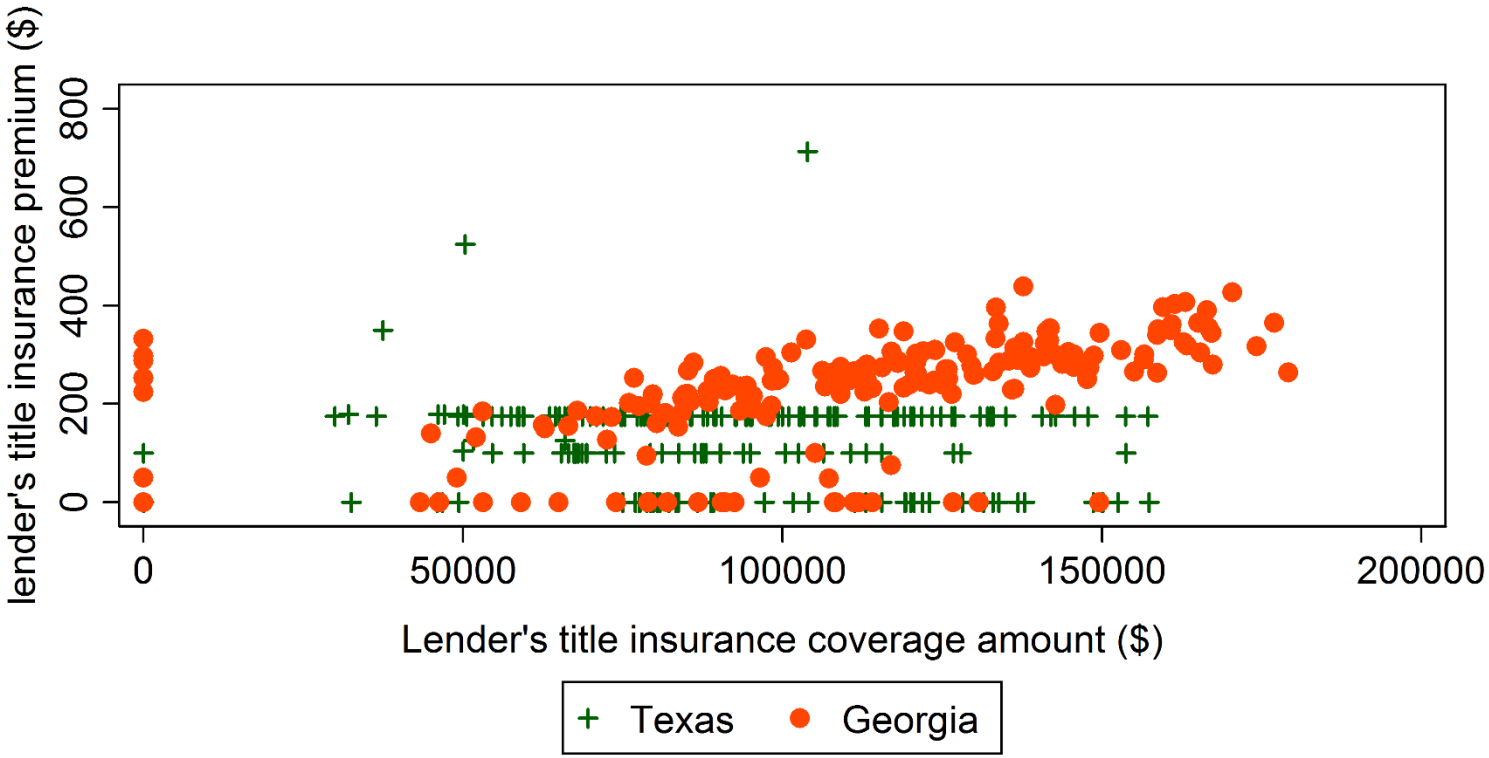
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.10 Comparison of Lender's Premium Between Texas and Florida



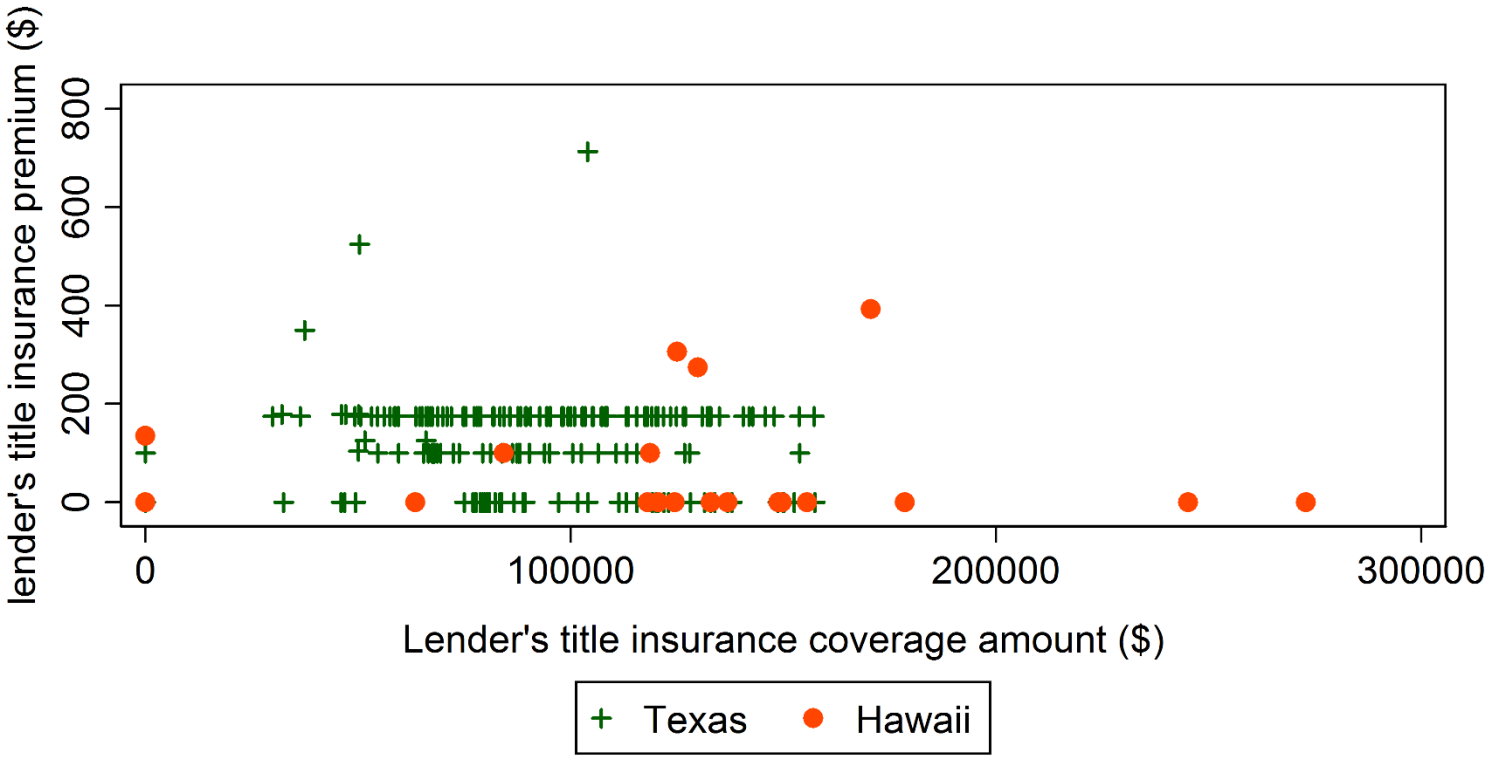
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.11 Comparison of Lender's Premium Between Texas and Georgia



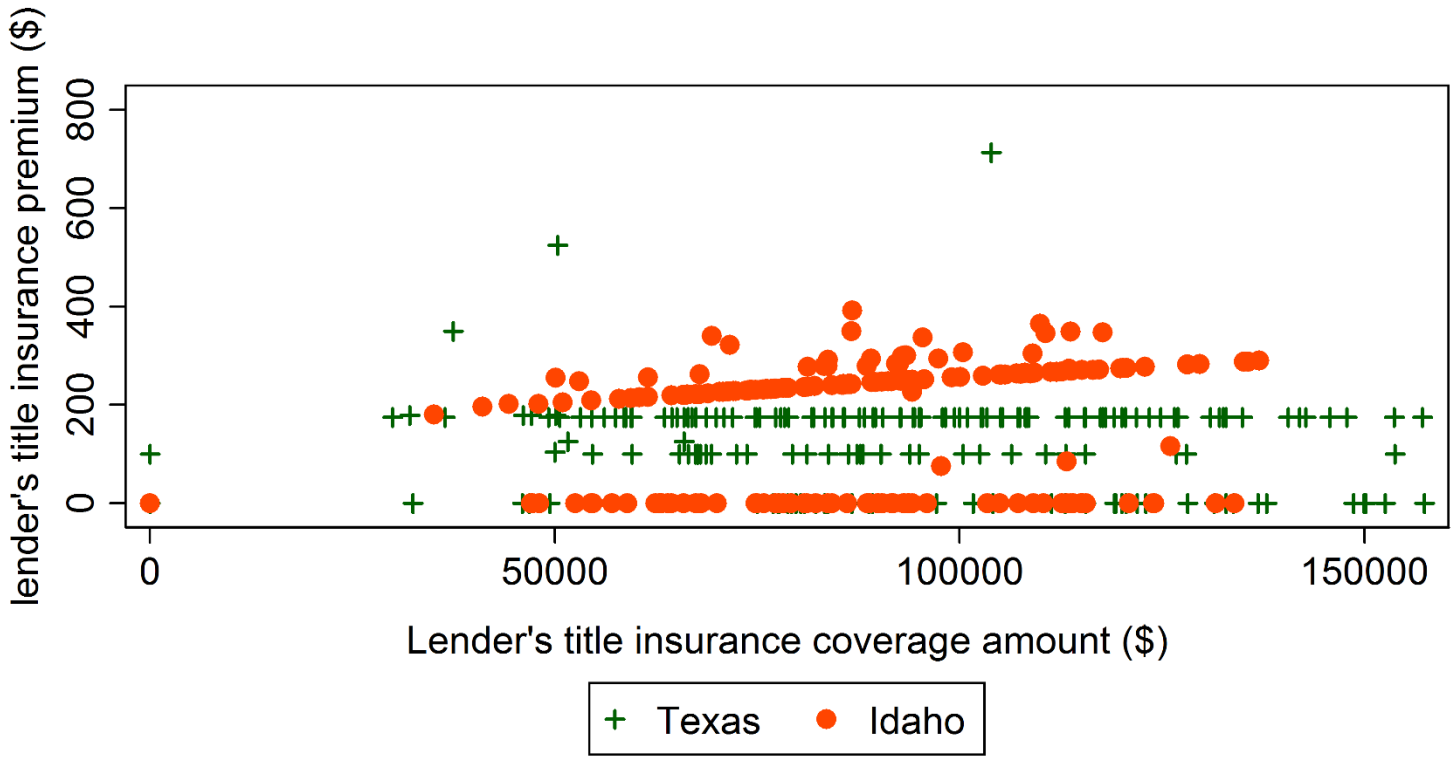
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.12 Comparison of Lender's Premium Between Texas and Hawaii



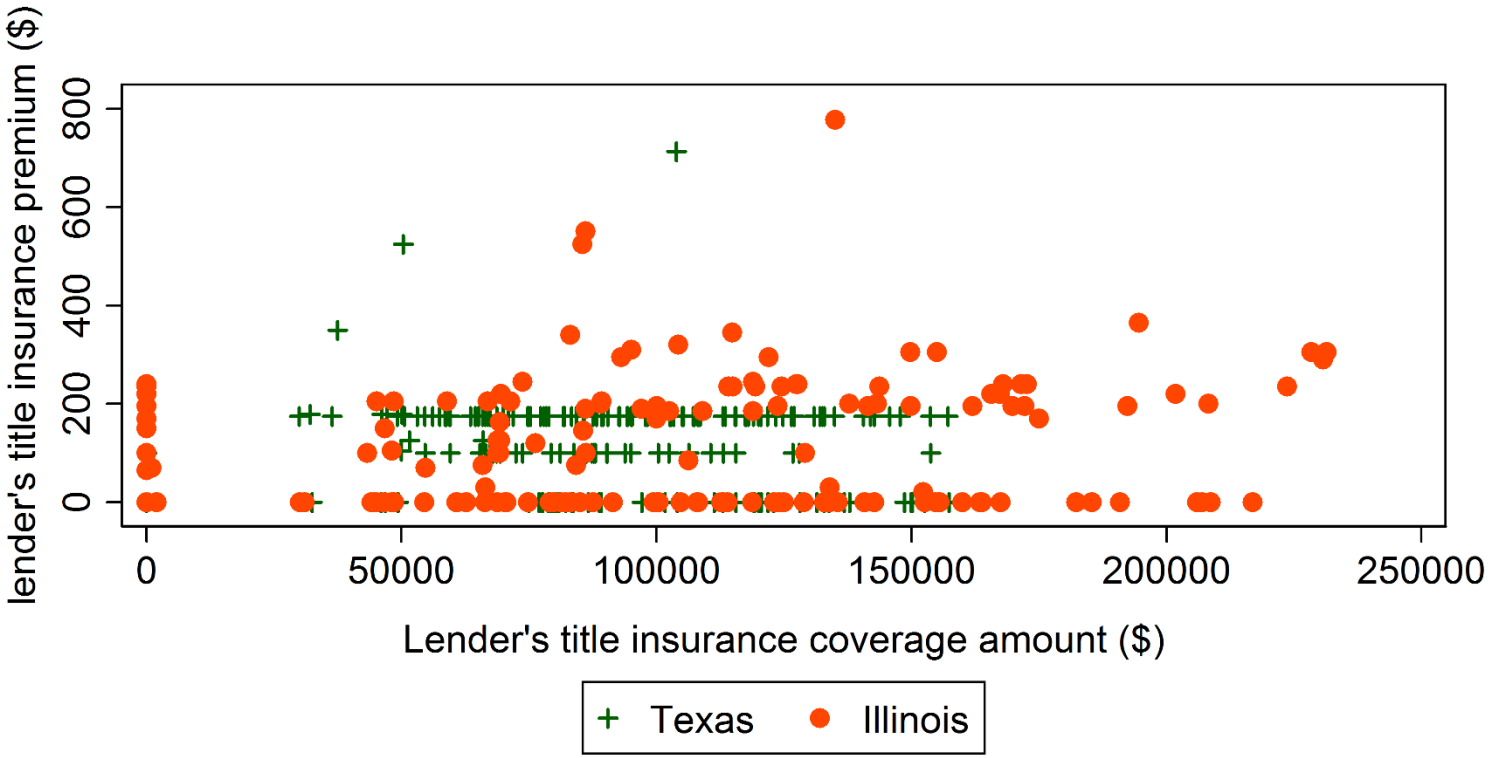
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.13 Comparison of Lender's Premium Between Texas and Idaho



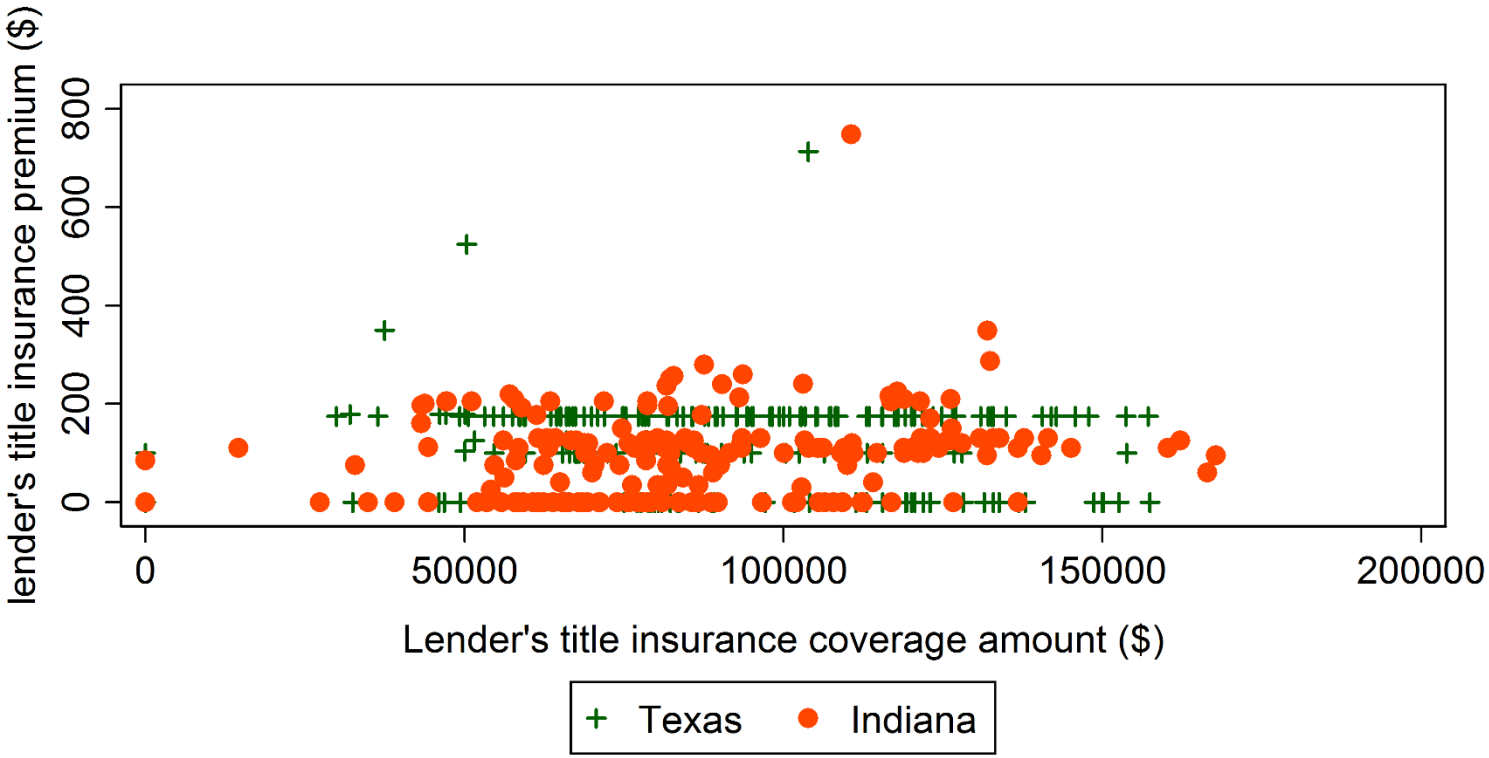
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.14 Comparison of Lender's Premium Between Texas and Illinois



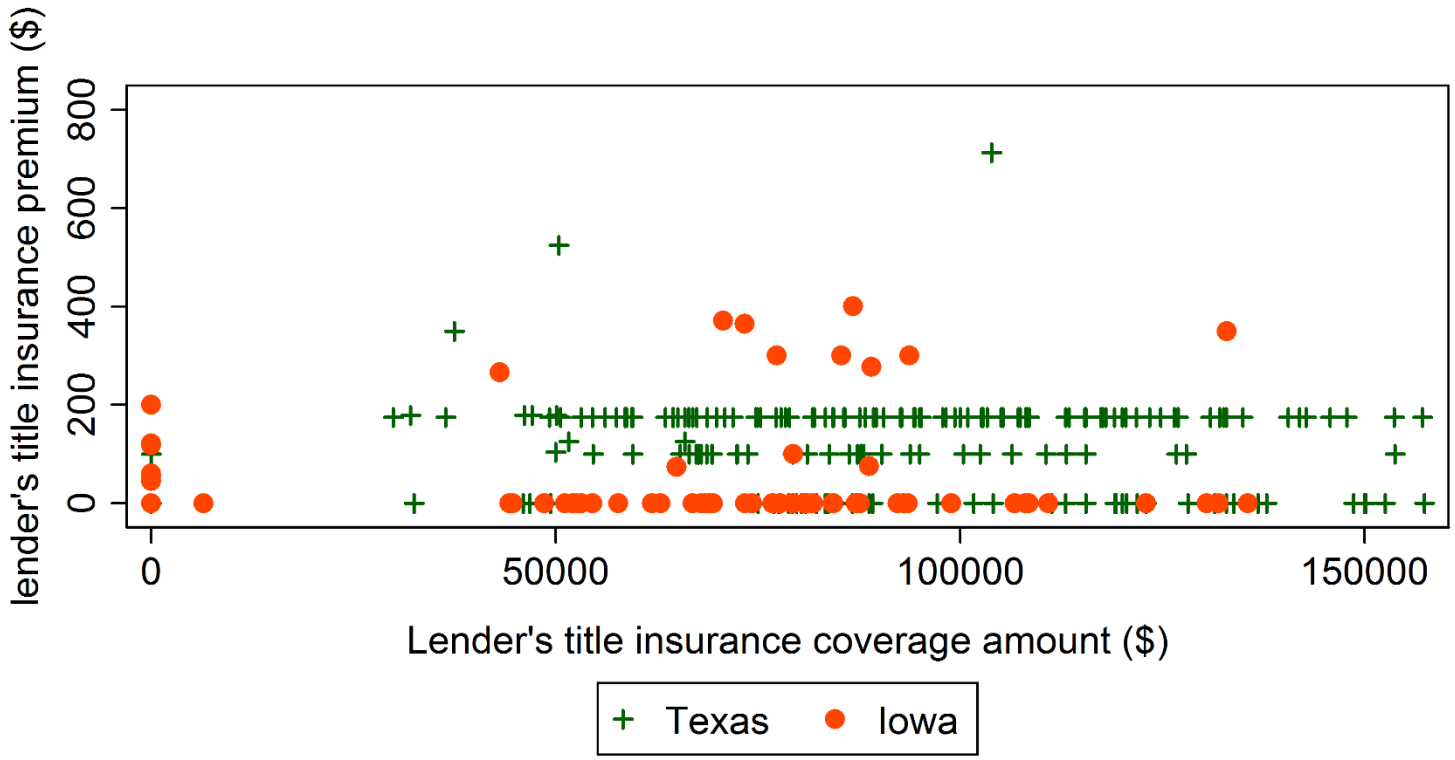
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.15 Comparison of Lender's Premium Between Texas and Indiana



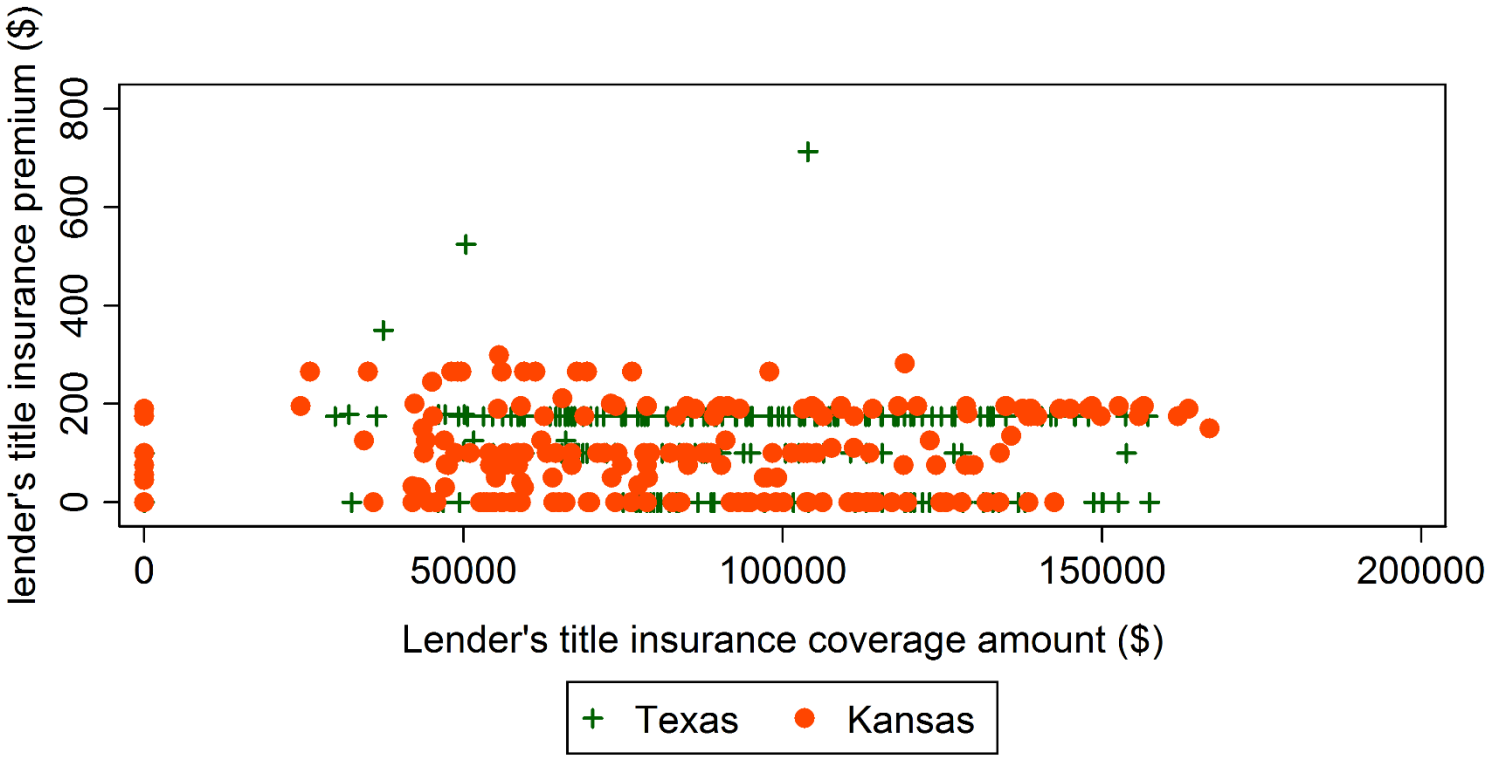
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.16 Comparison of Lender's Premium Between Texas and Iowa



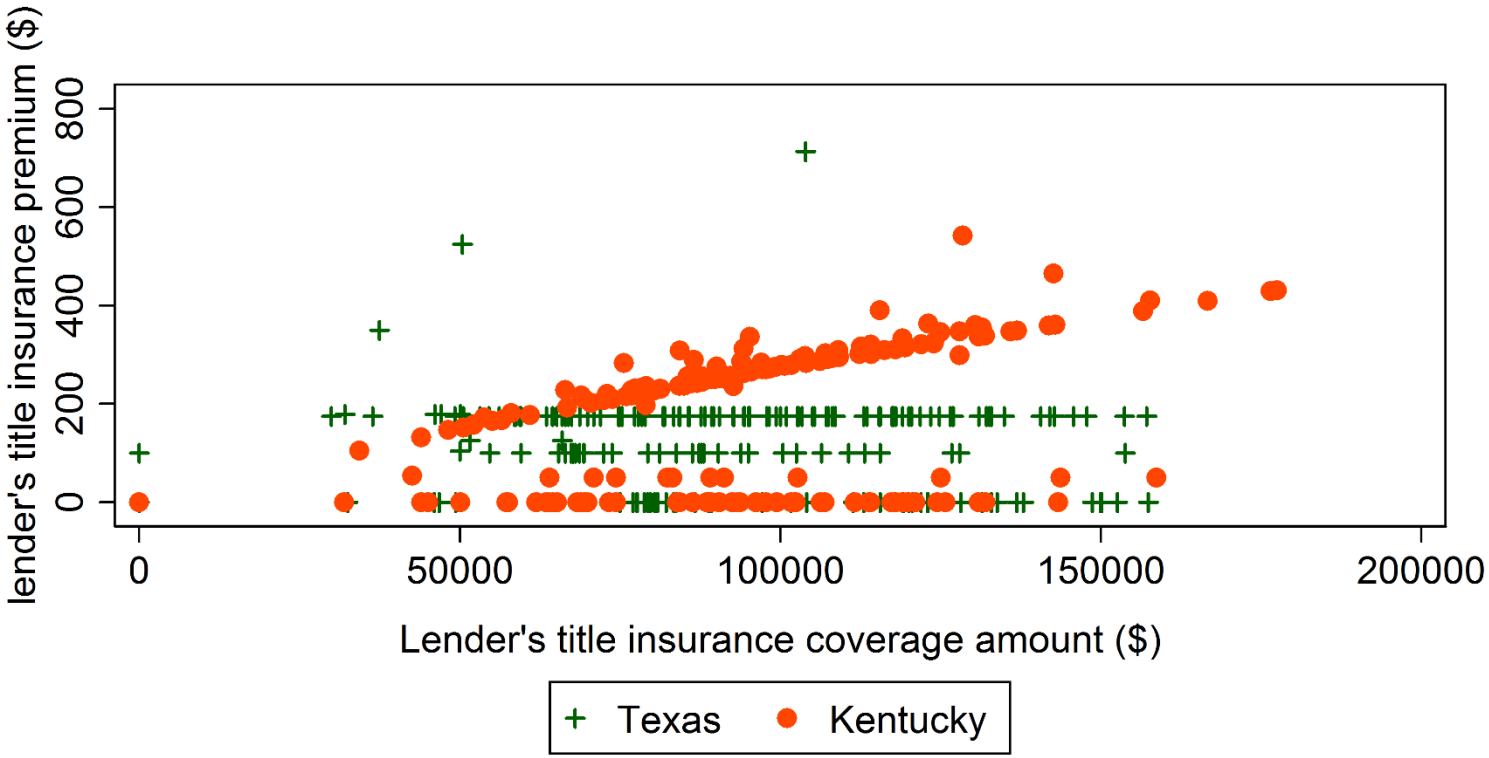
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.17 Comparison of Lender's Premium Between Texas and Kansas



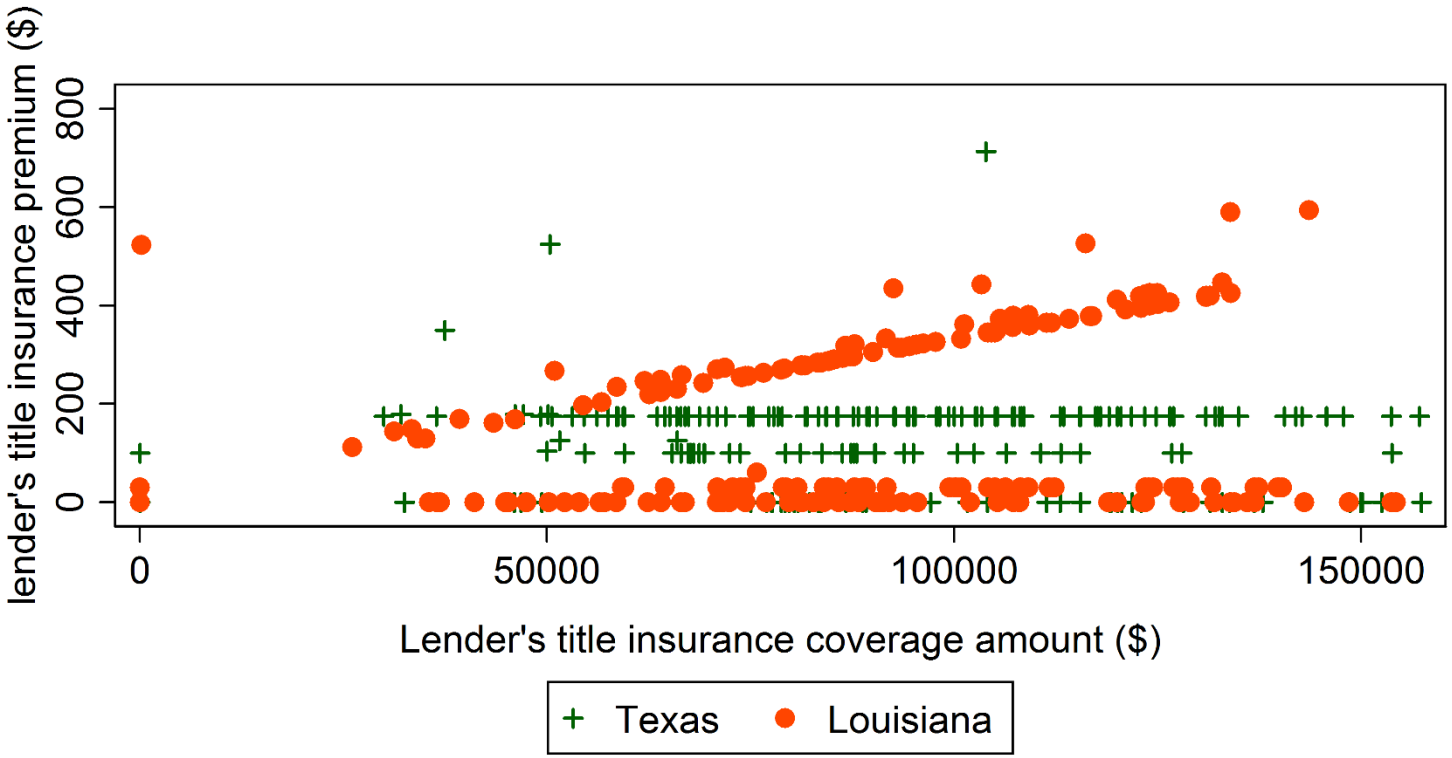
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.18 Comparison of Lender's Premium Between Texas and Kentucky



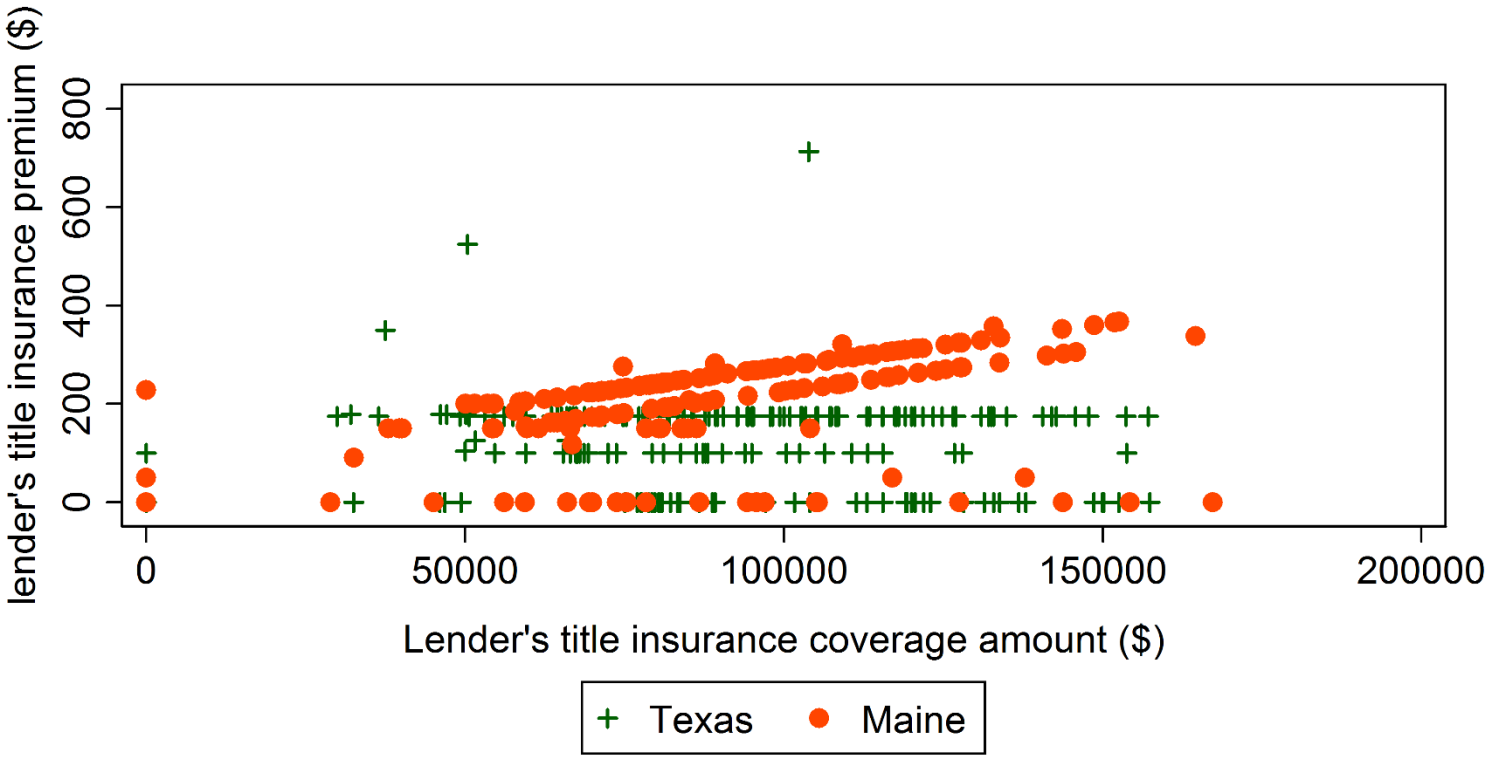
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.19 Comparison of Lender's Premium Between Texas and Louisiana



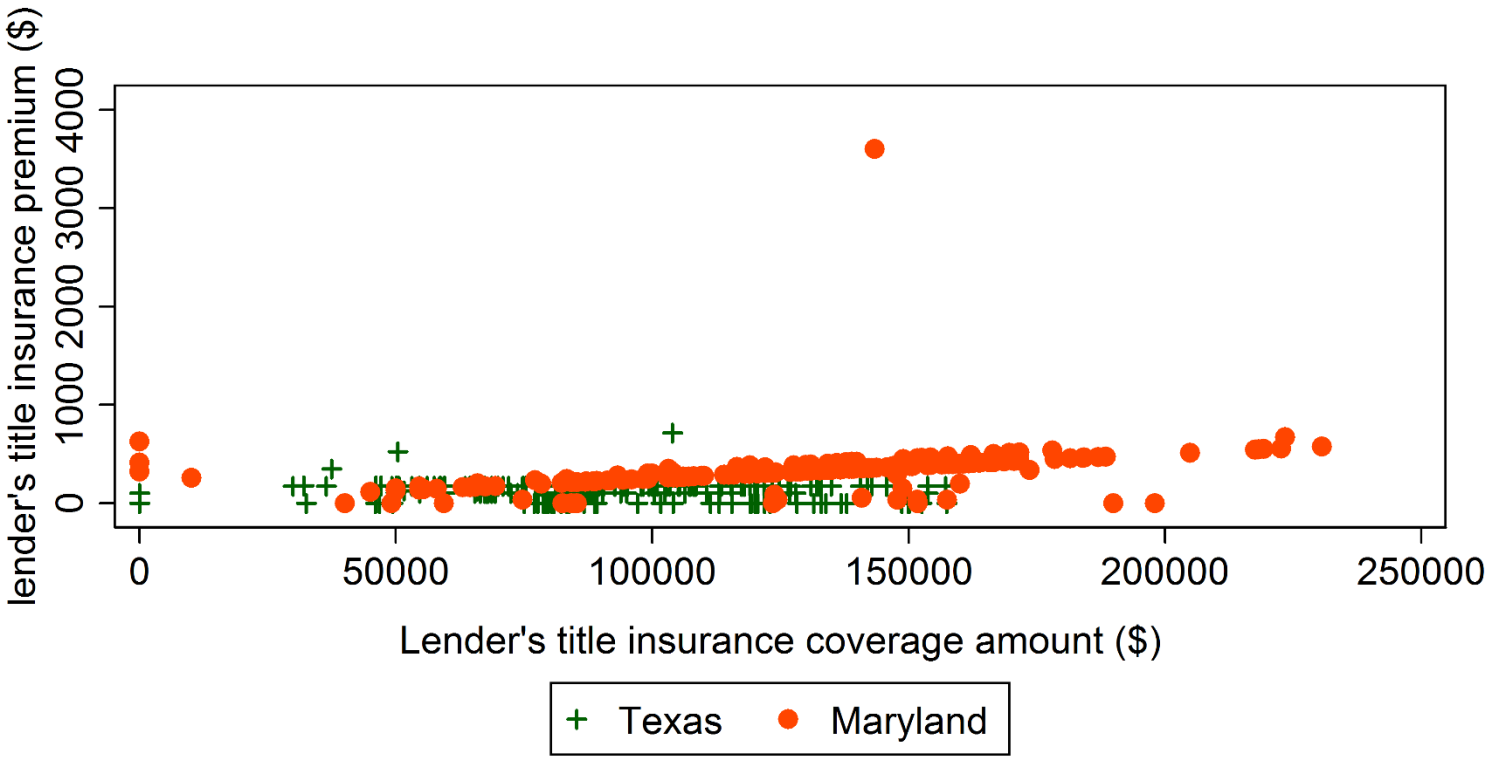
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.20 Comparison of Lender's Premium Between Texas and Maine



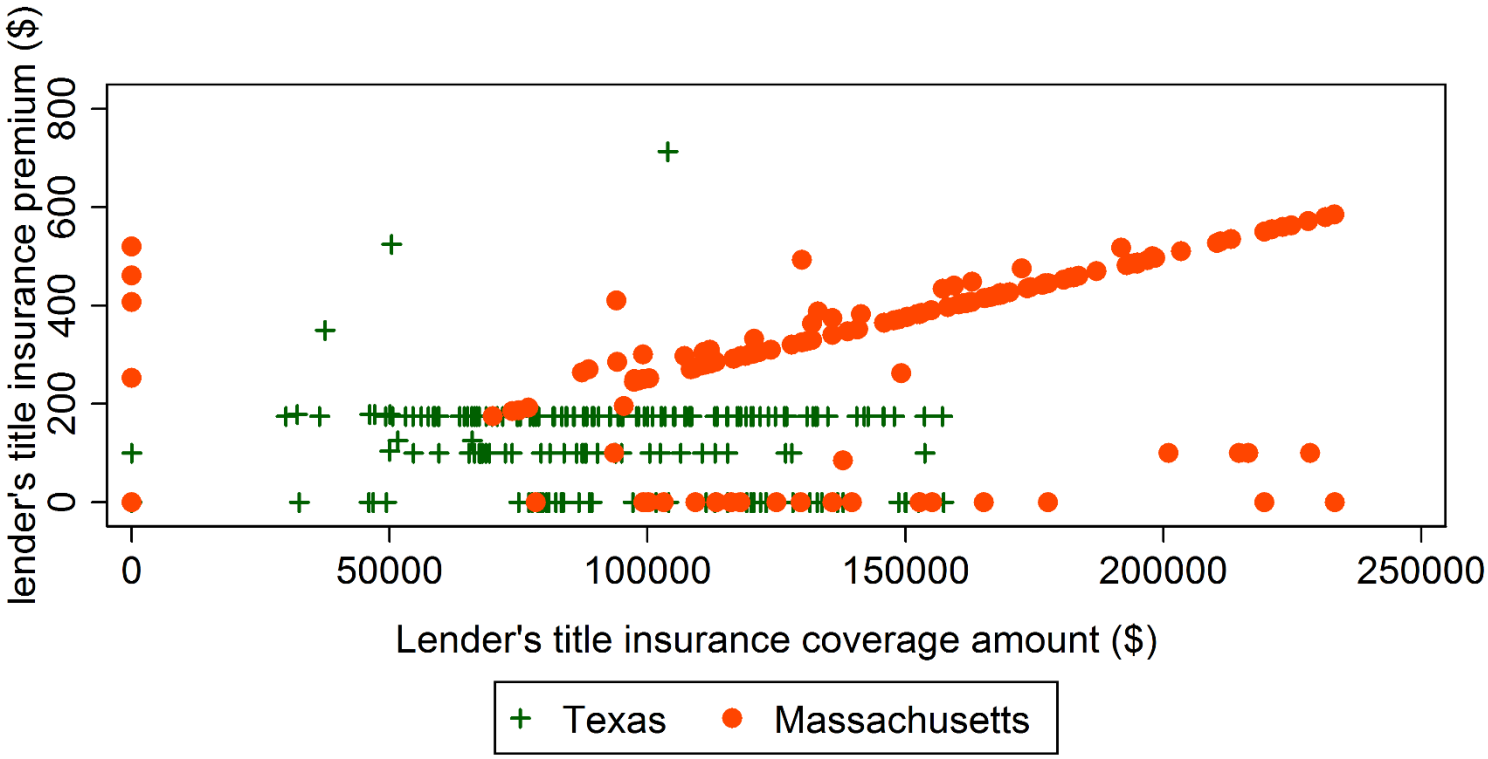
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.21 Comparison of Lender's Premium Between Texas and Maryland



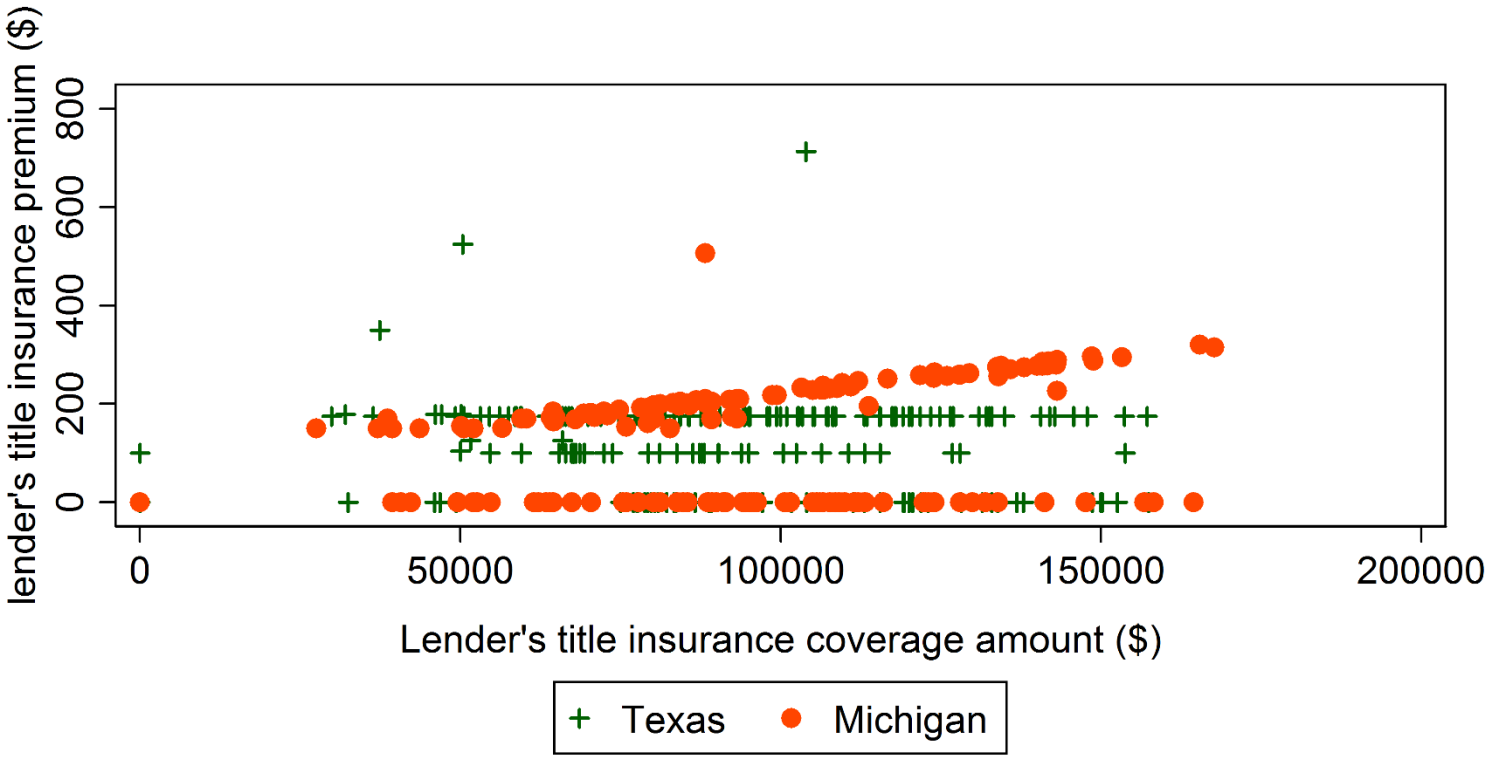
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.22 Comparison of Lender's Premium Between Texas and Massachusett



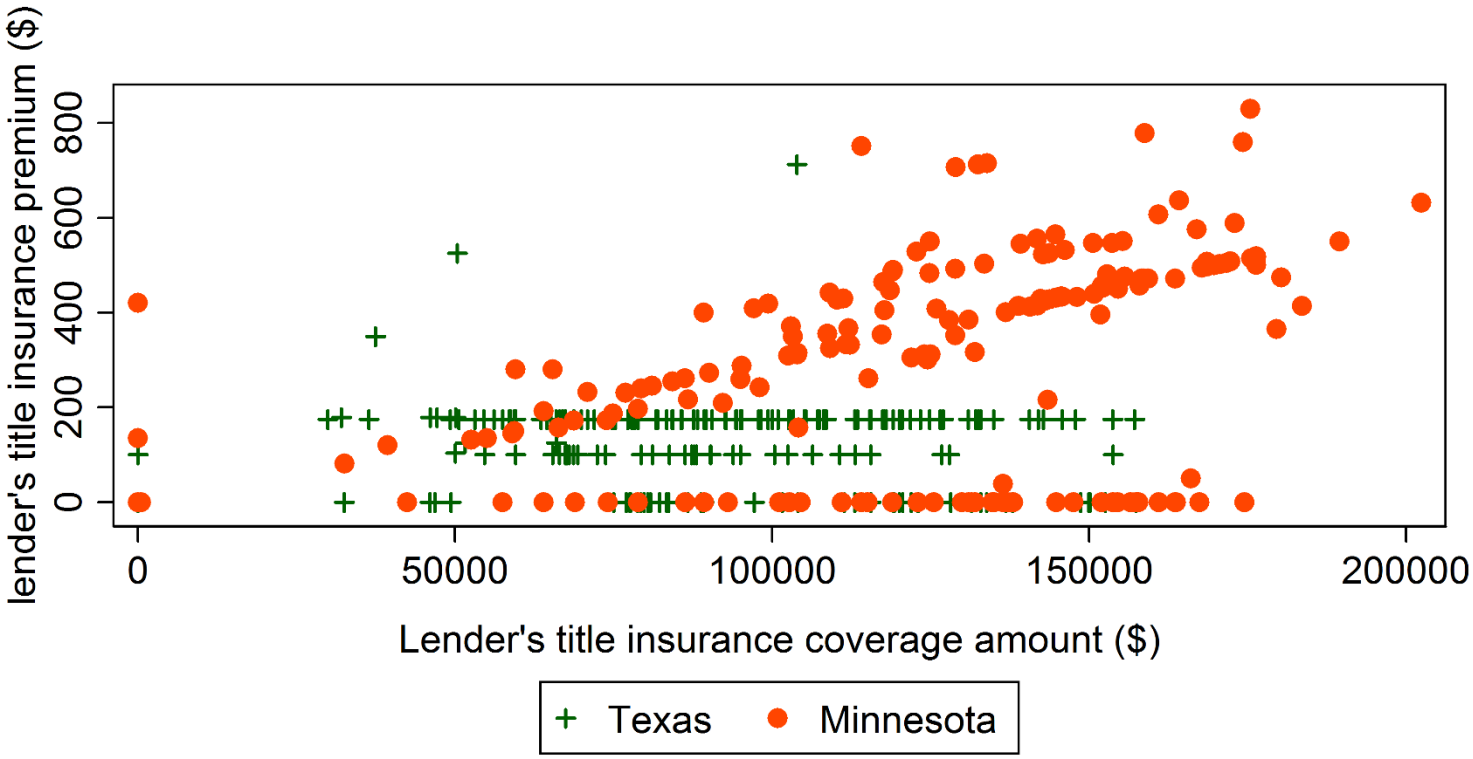
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.23 Comparison of Lender's Premium Between Texas and Michigan



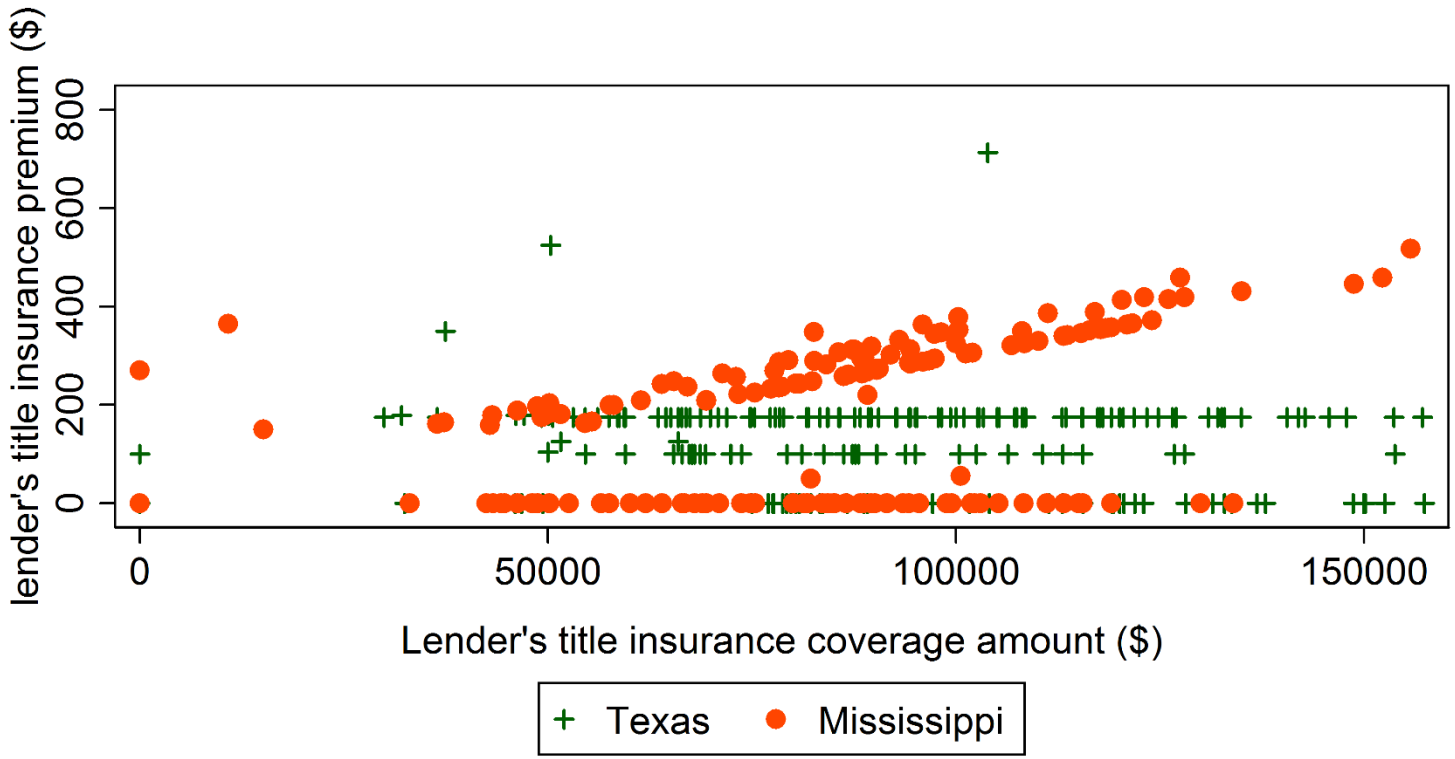
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.24 Comparison of Lender's Premium Between Texas and Minnesota



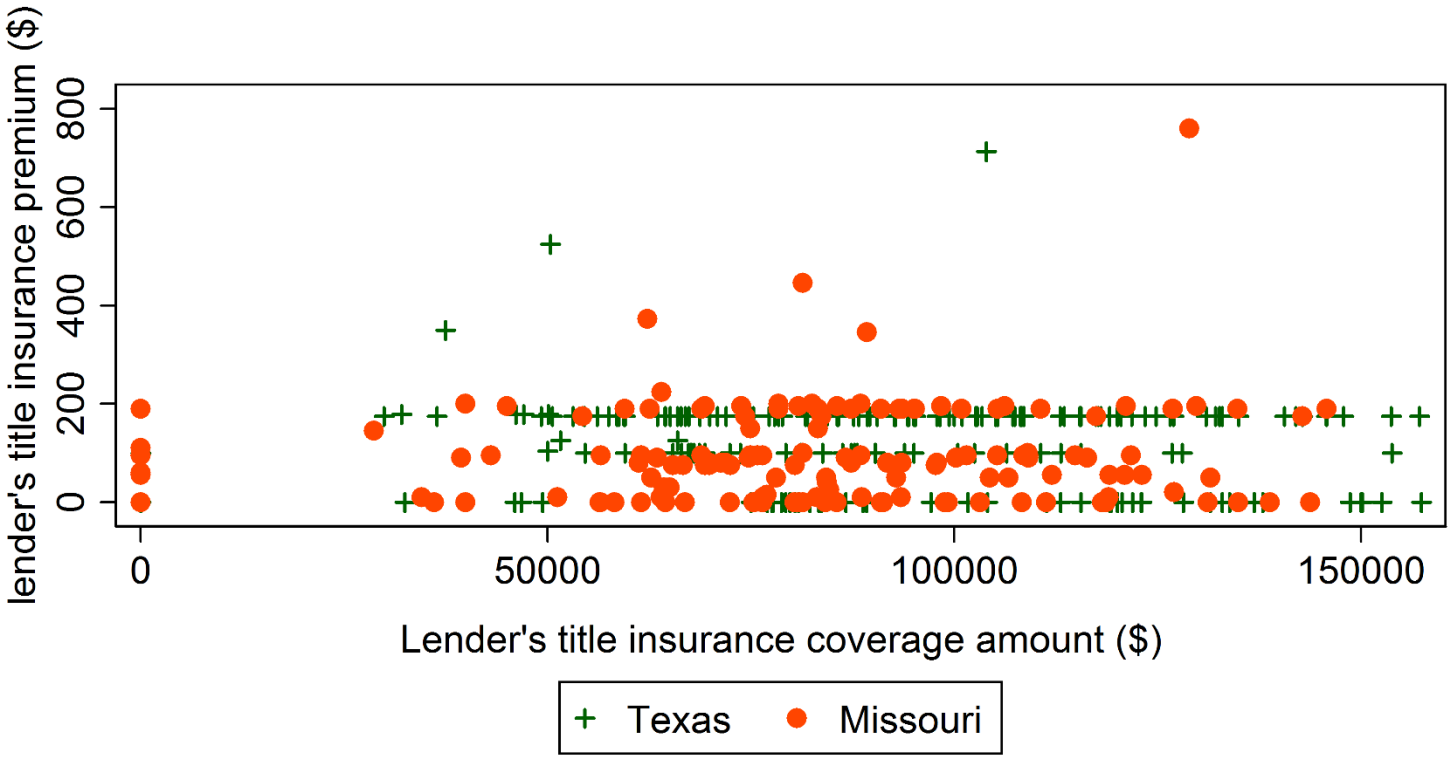
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.25 Comparison of Lender's Premium Between Texas and Mississippi



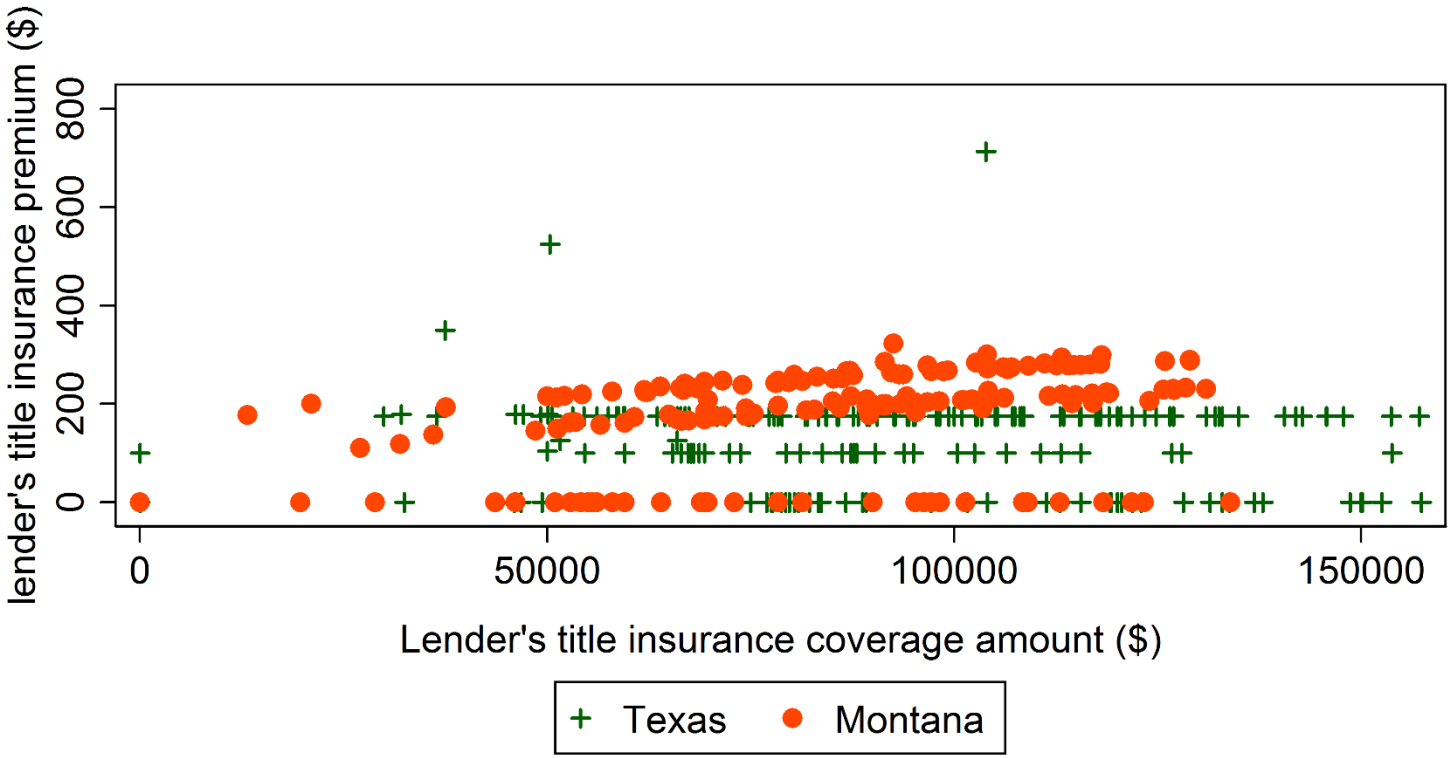
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.26 Comparison of Lender's Premium Between Texas and Missouri



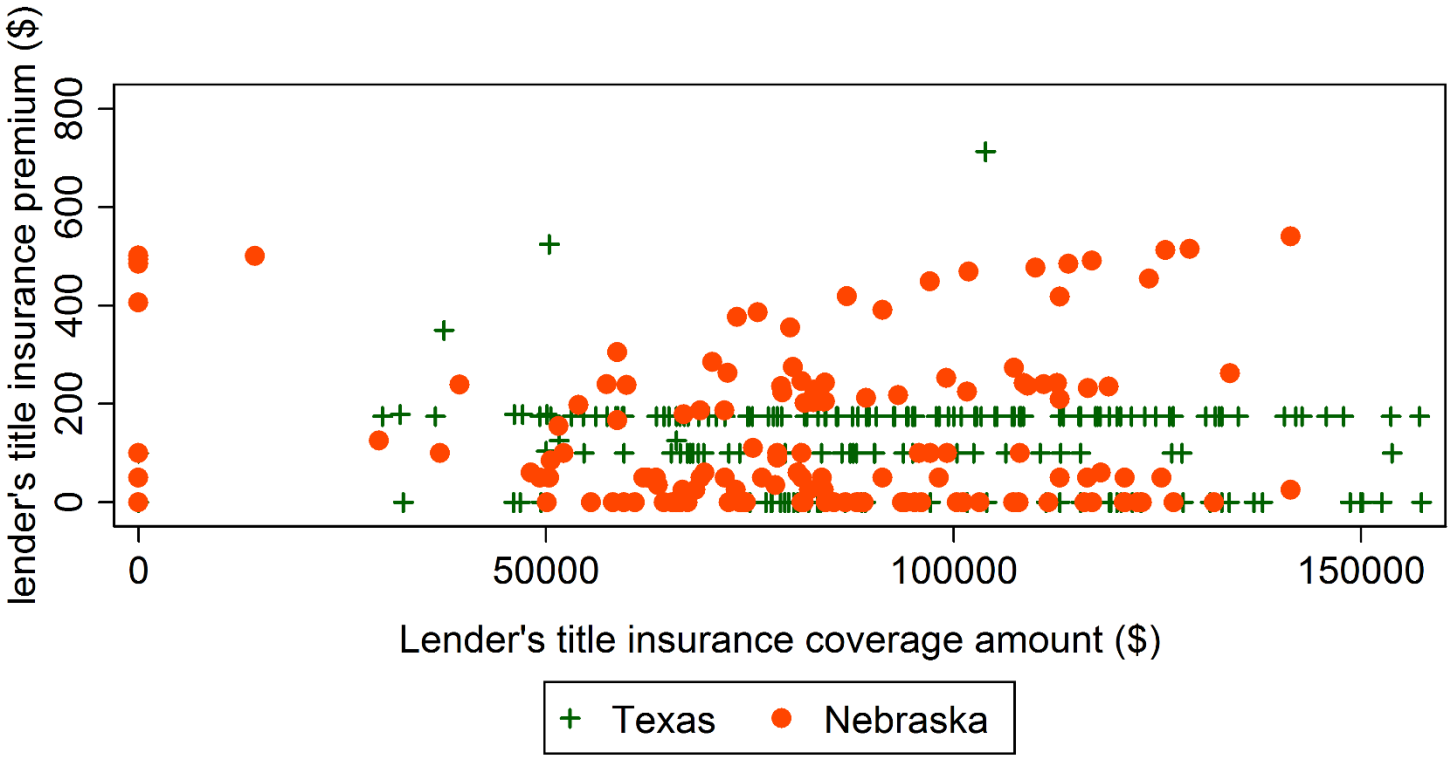
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.27 Comparison of Lender's Premium Between Texas and Montana



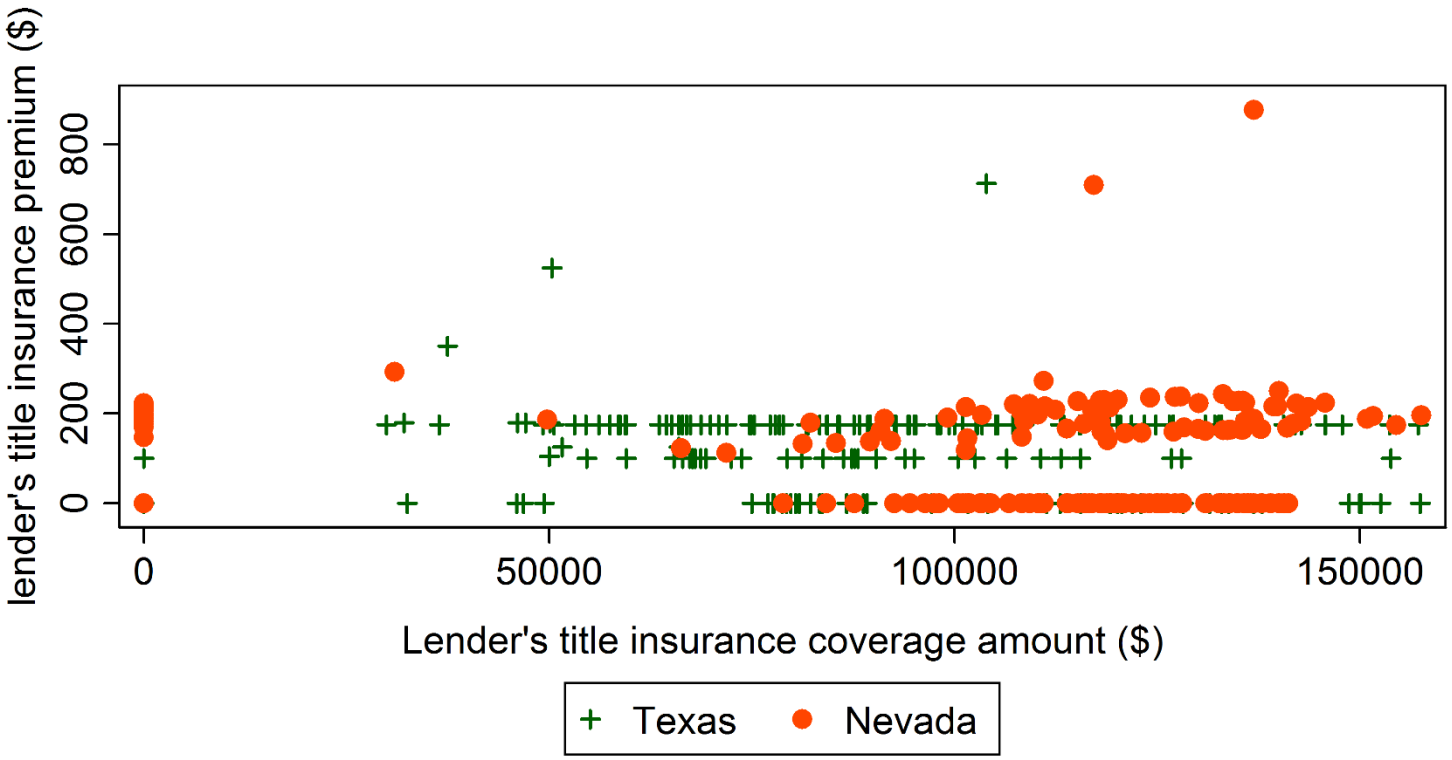
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.28 Comparison of Lender's Premium Between Texas and Nebraska



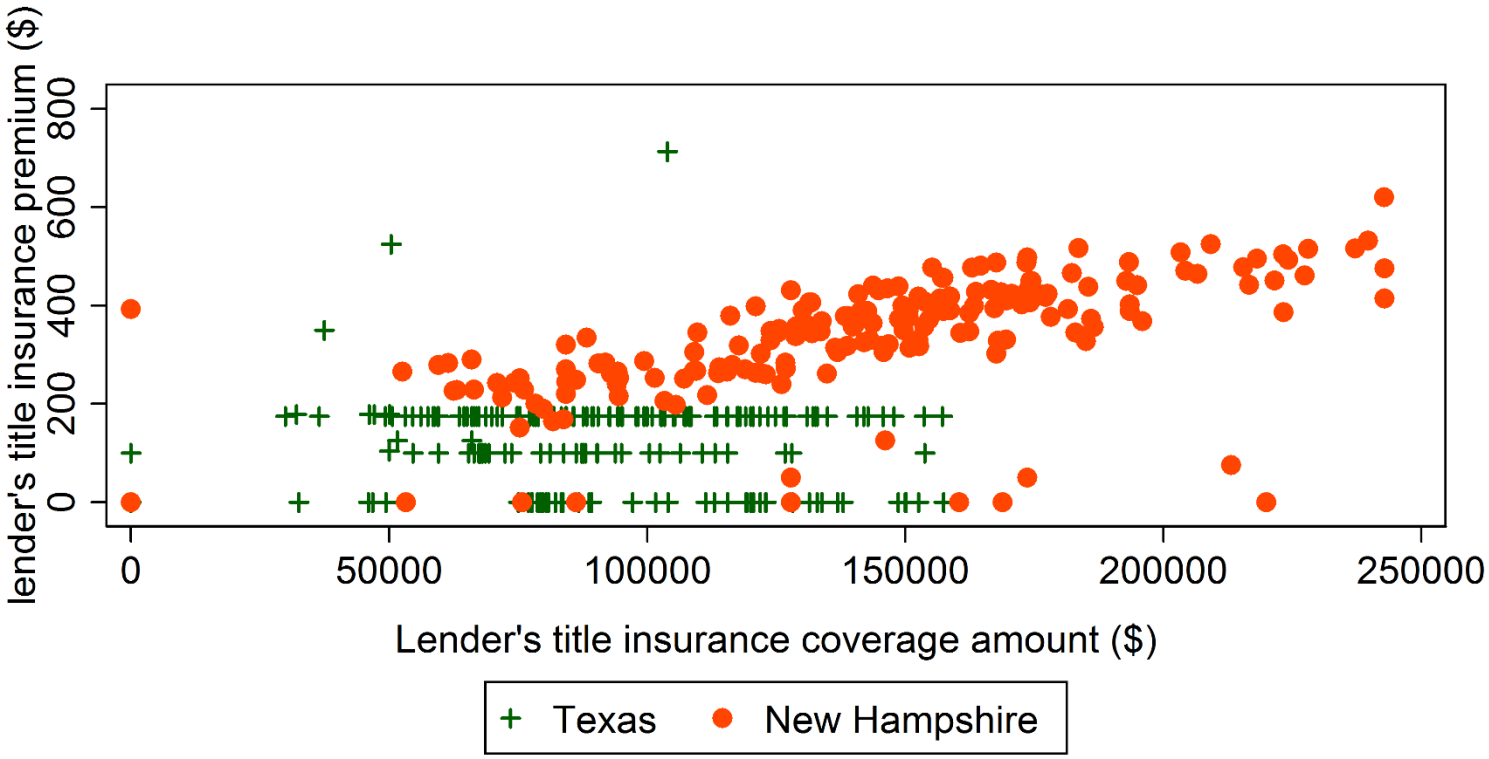
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.29 Comparison of Lender's Premium Between Texas and Nevada



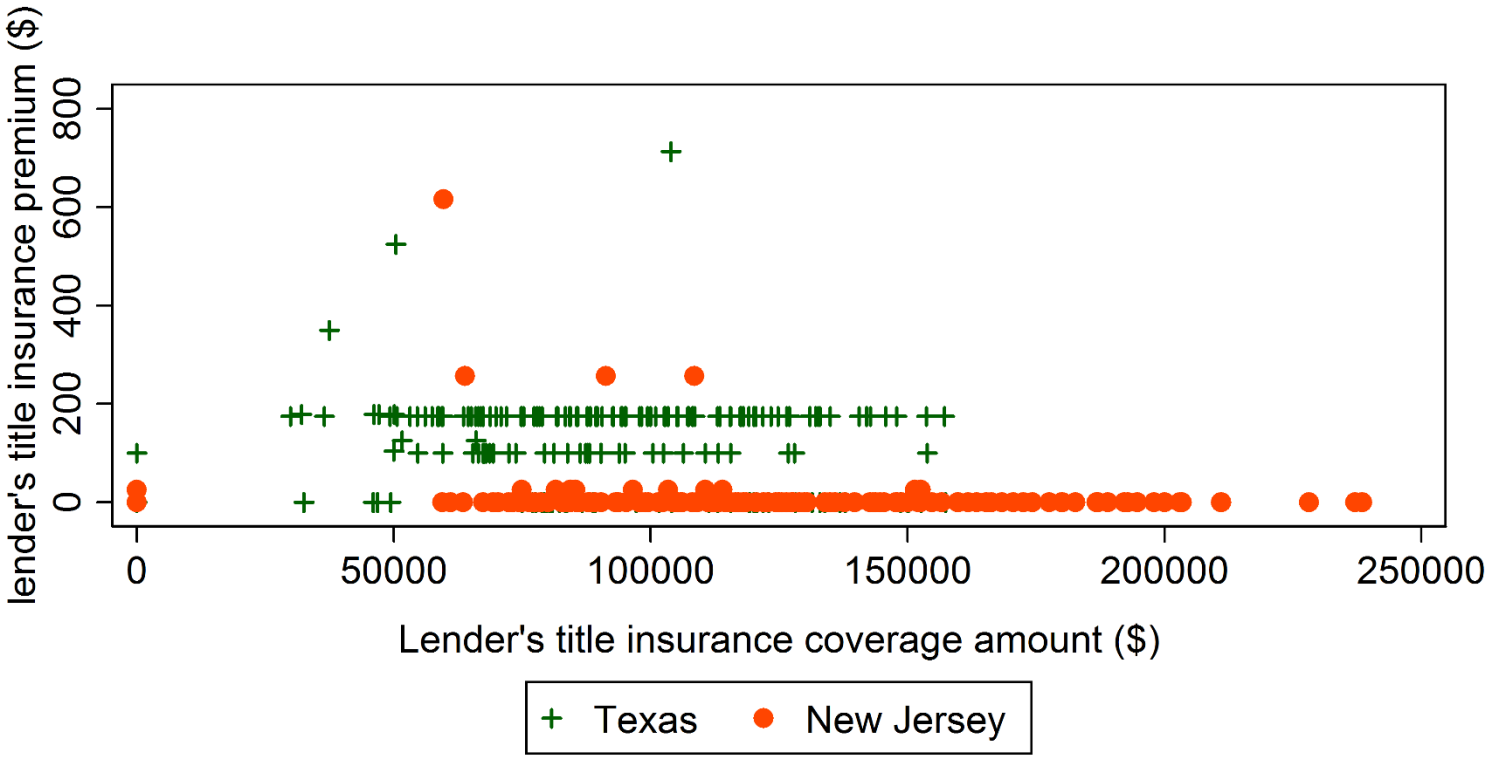
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.30 Comparison of Lender's Premium Between Texas and New Hampshi



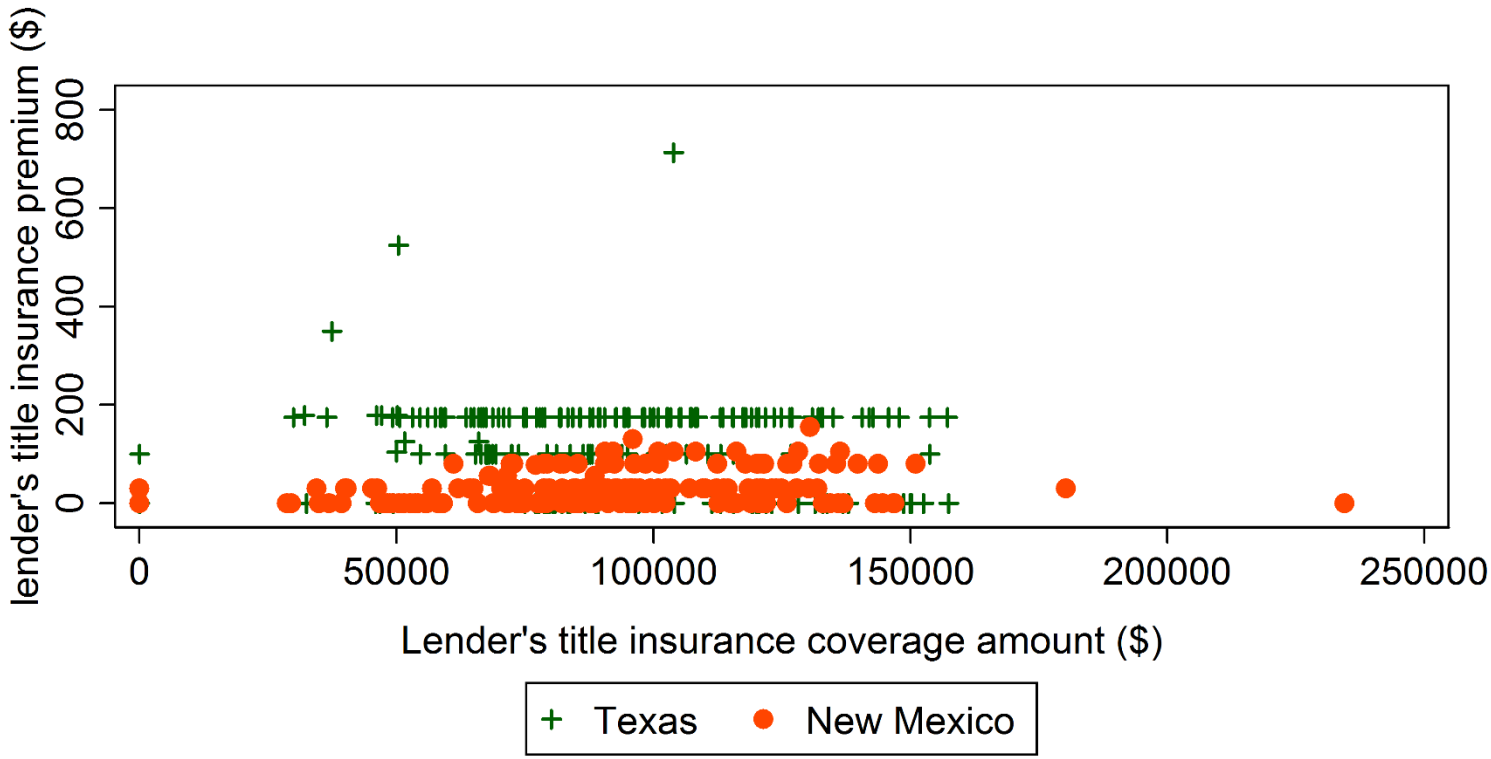
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.31 Comparison of Lender's Premium Between Texas and New Jersey



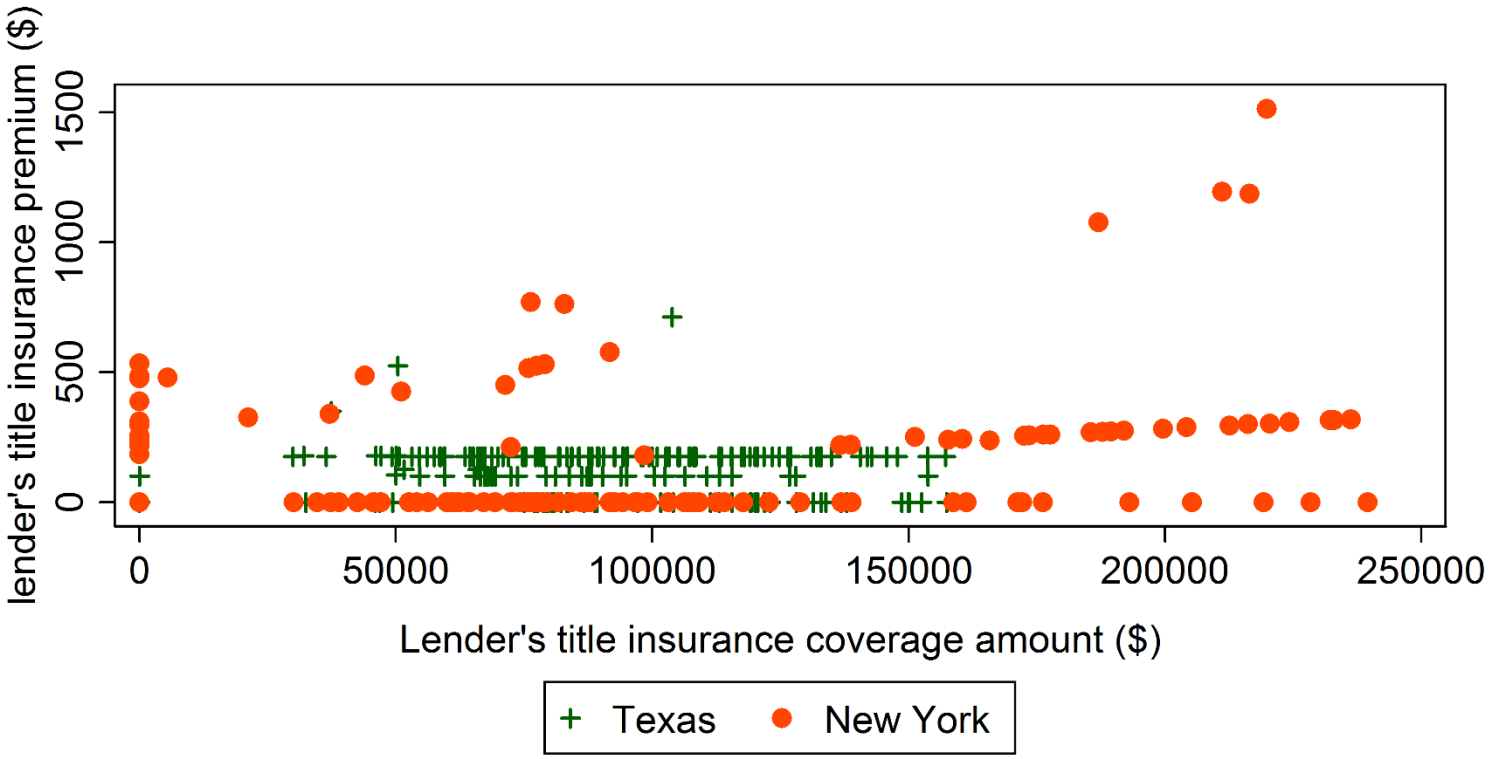
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.32 Comparison of Lender's Premium Between Texas and New Mexico



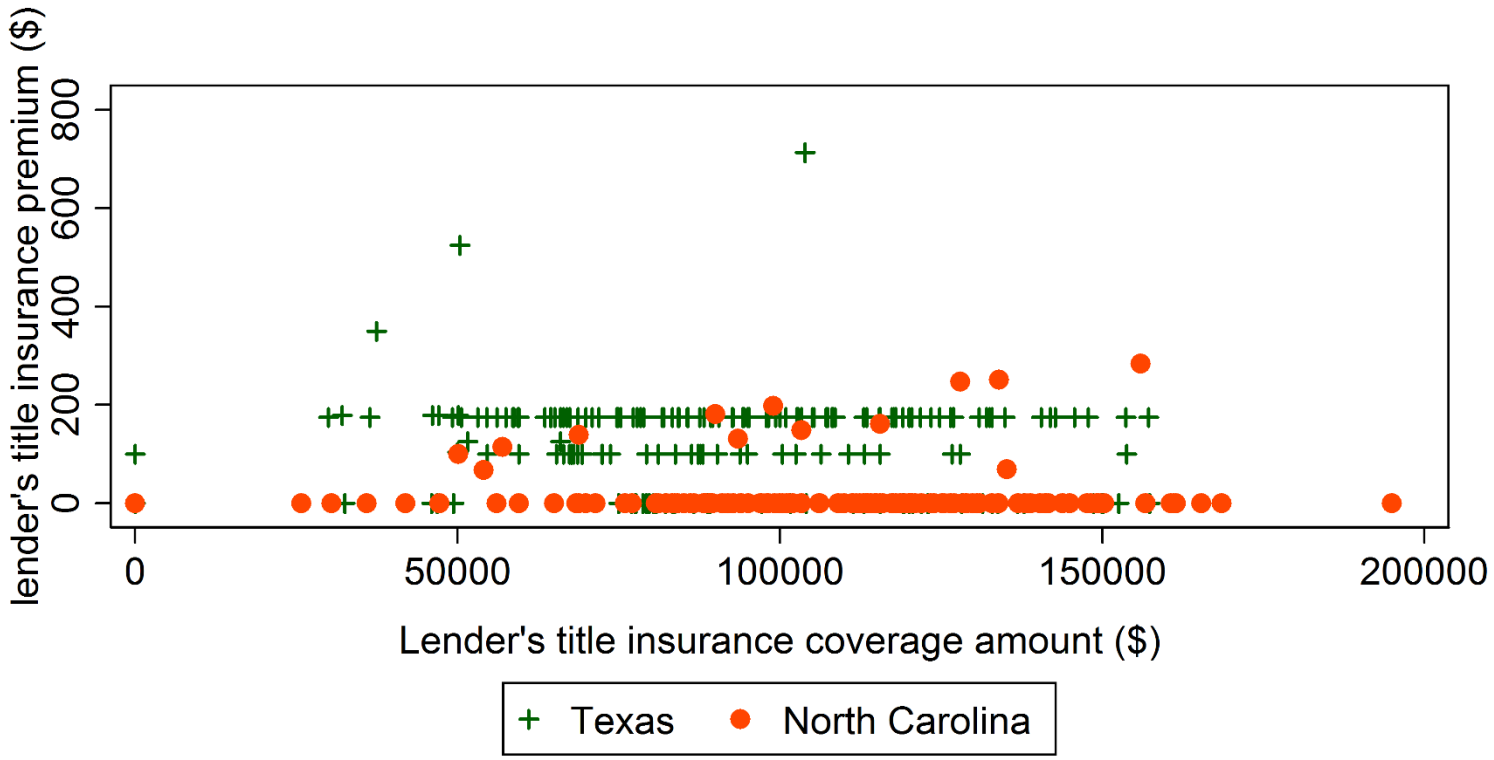
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.33 Comparison of Lender's Premium Between Texas and New York



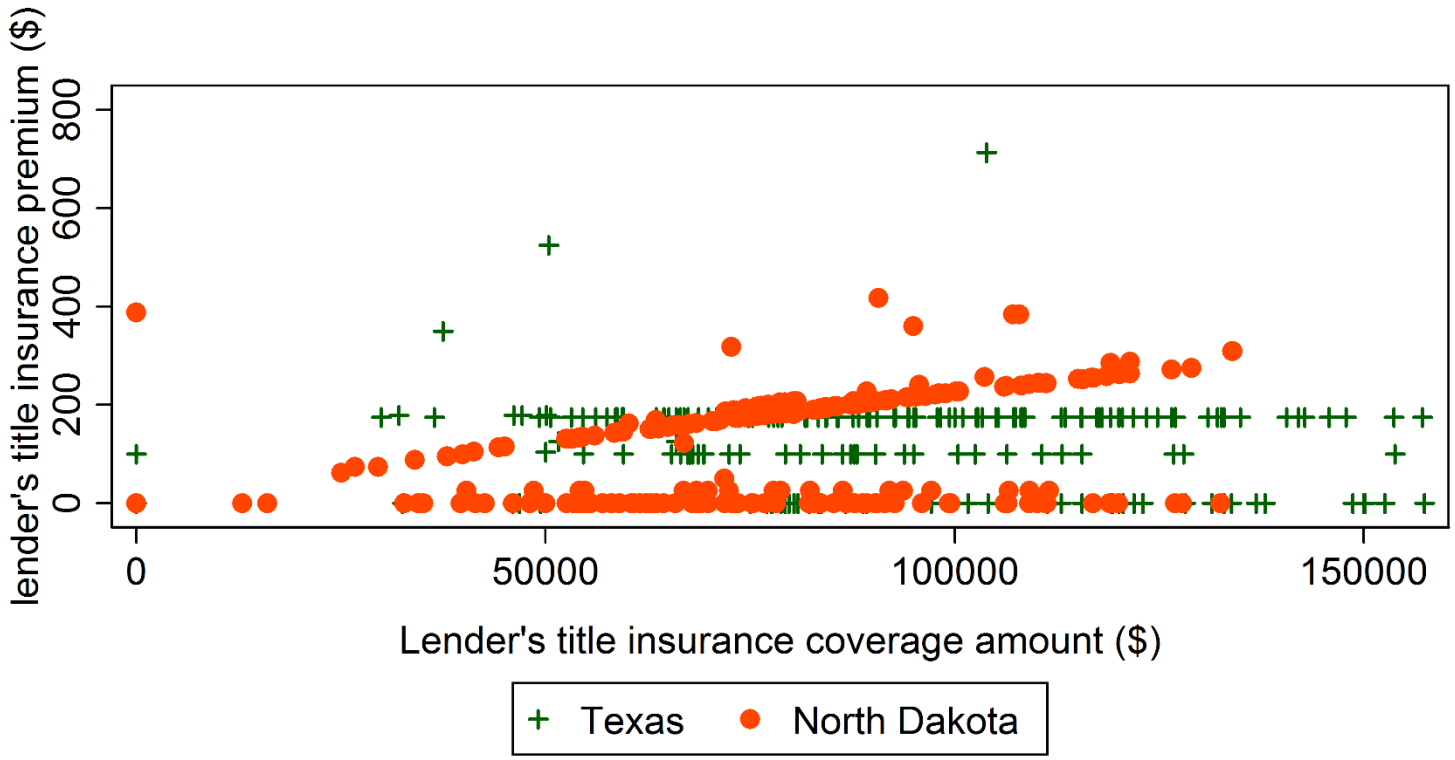
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.34 Comparison of Lender's Premium Between Texas and North Carolin



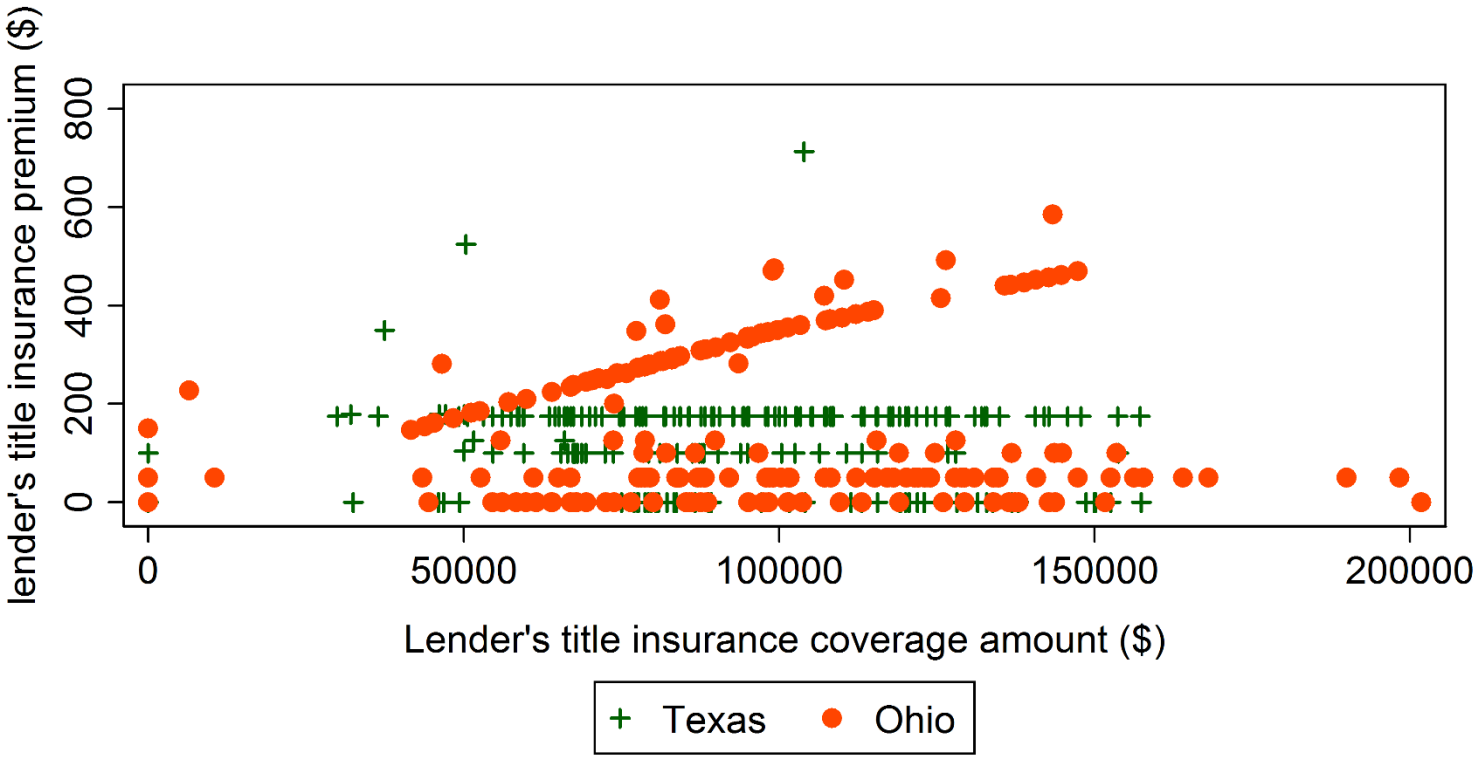
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.35 Comparison of Lender's Premium Between Texas and North Dakota



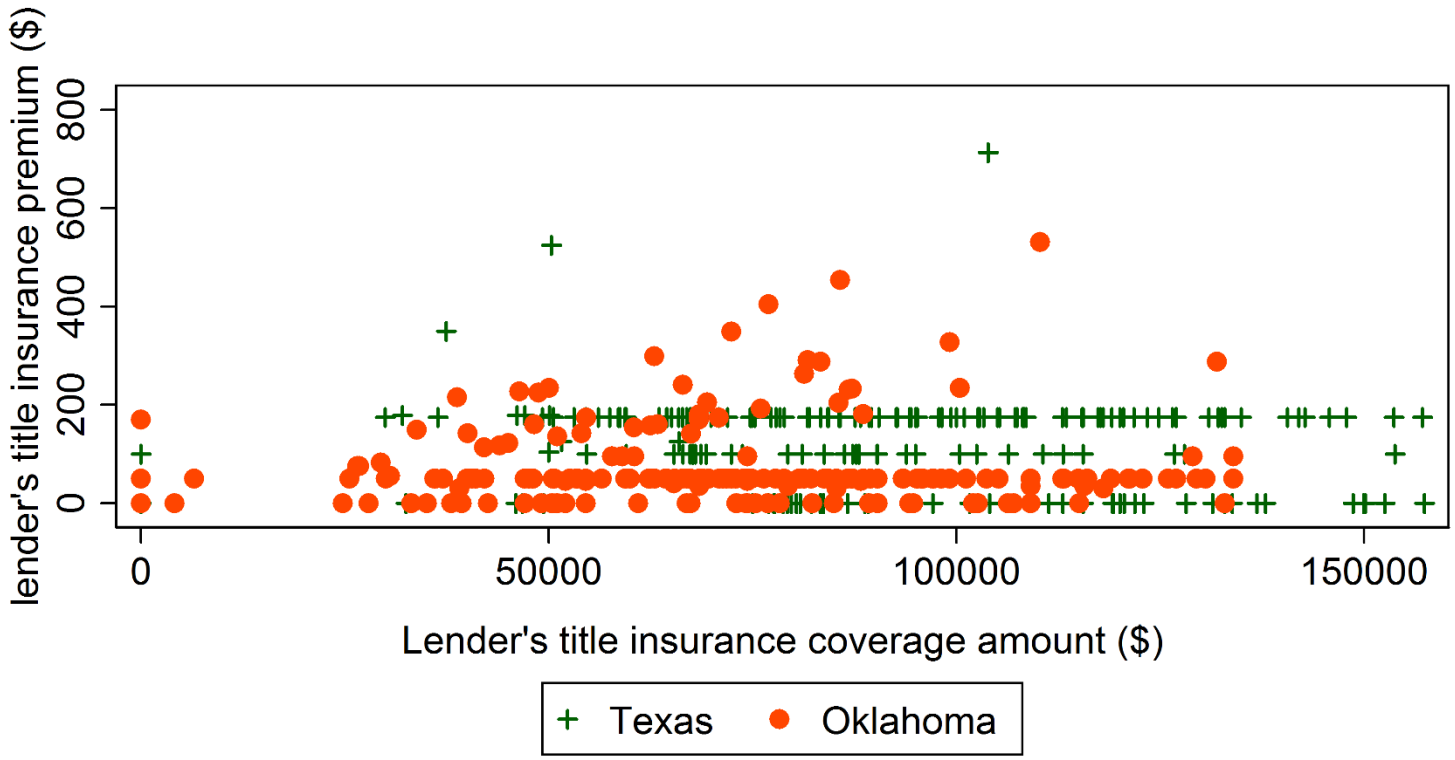
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.36 Comparison of Lender's Premium Between Texas and Ohio



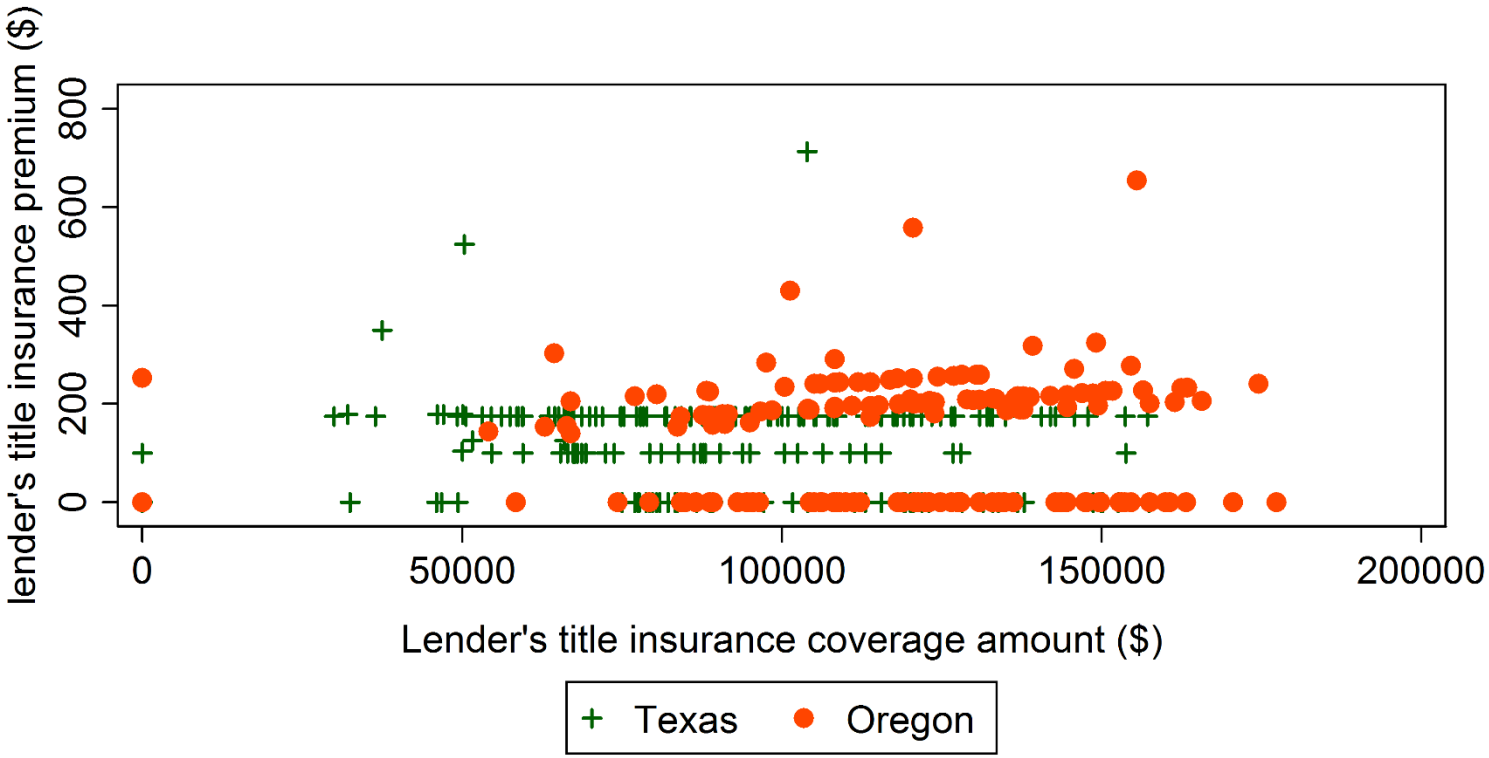
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.37 Comparison of Lender's Premium Between Texas and Oklahoma



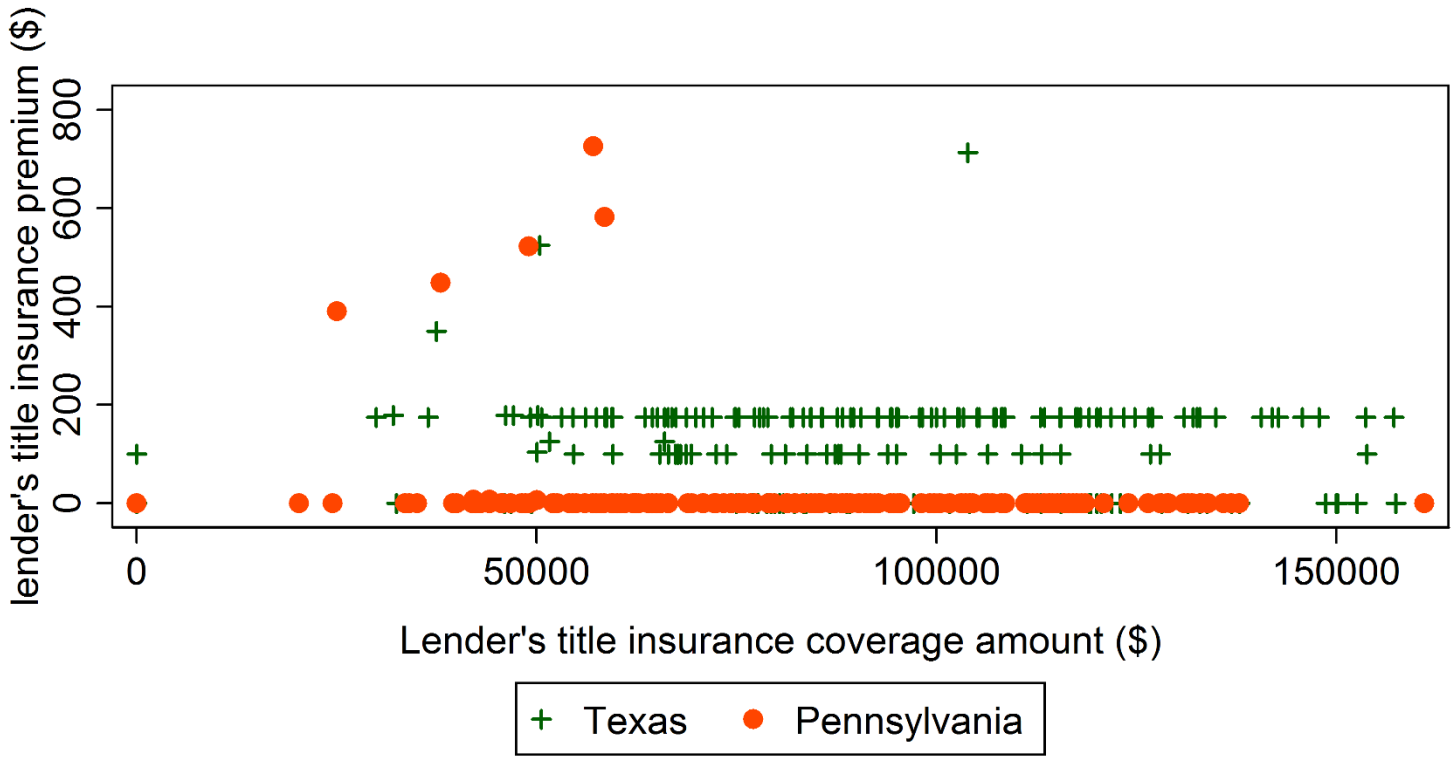
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.38 Comparison of Lender's Premium Between Texas and Oregon



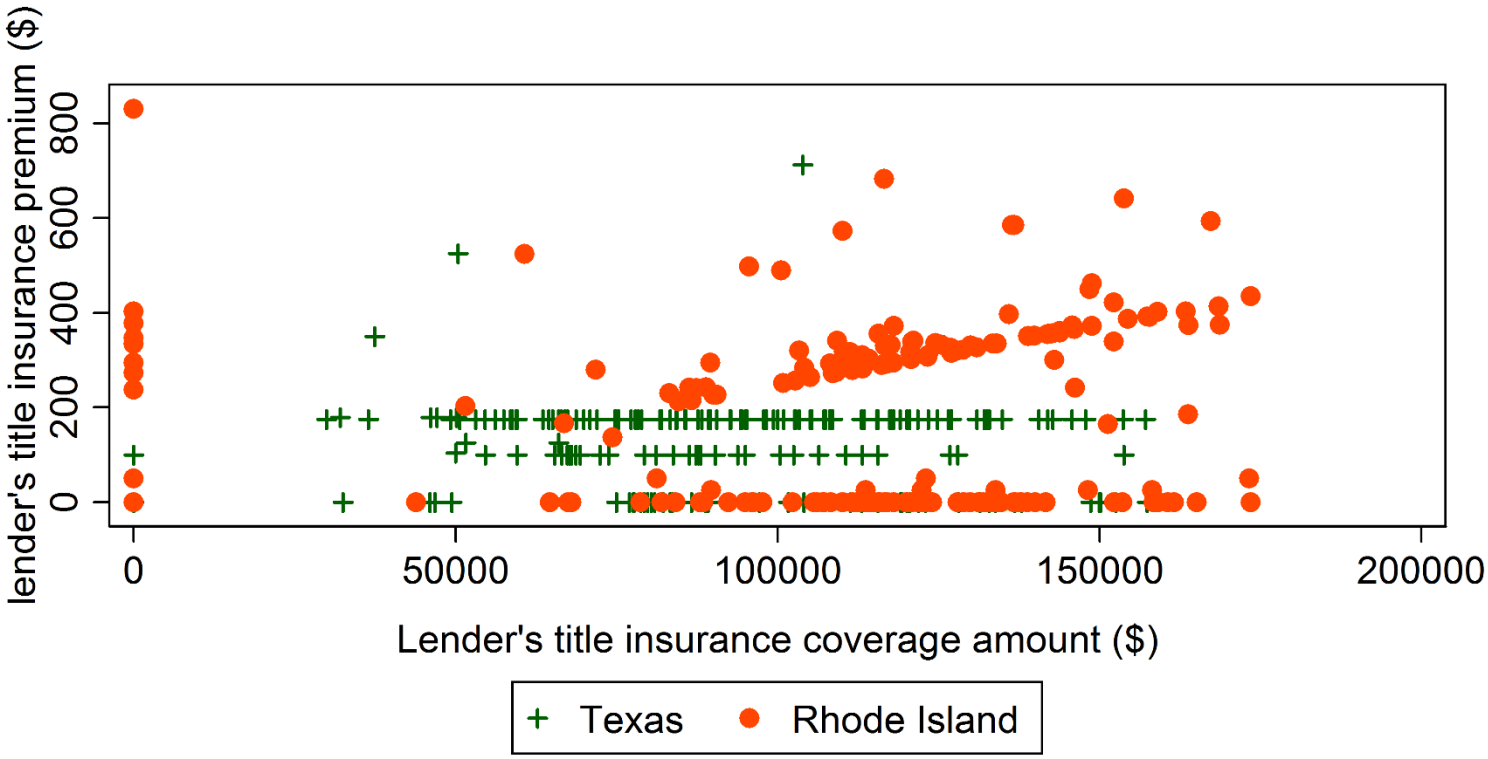
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.39 Comparison of Lender's Premium Between Texas and Pennsylvania



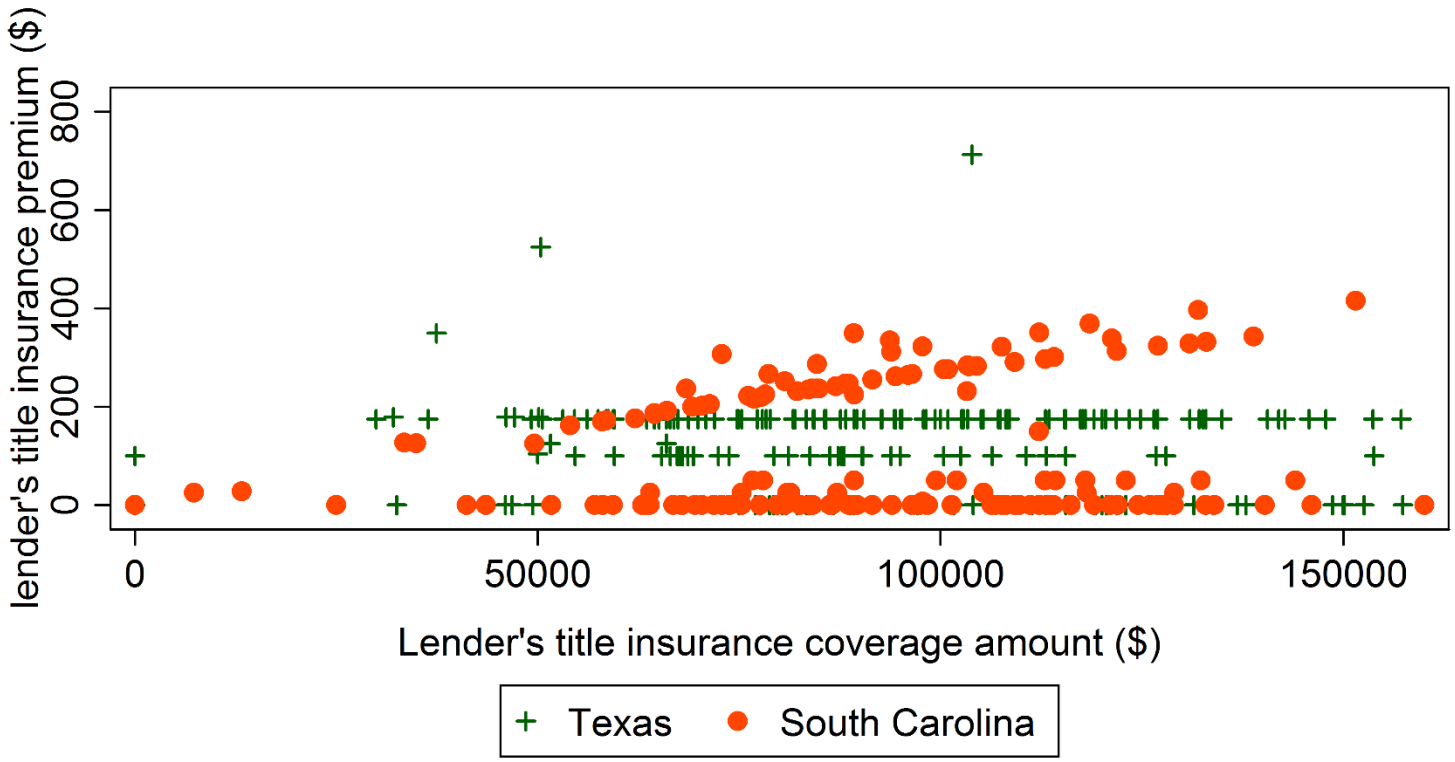
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.40 Comparison of Lender's Premium Between Texas and Rhode Island



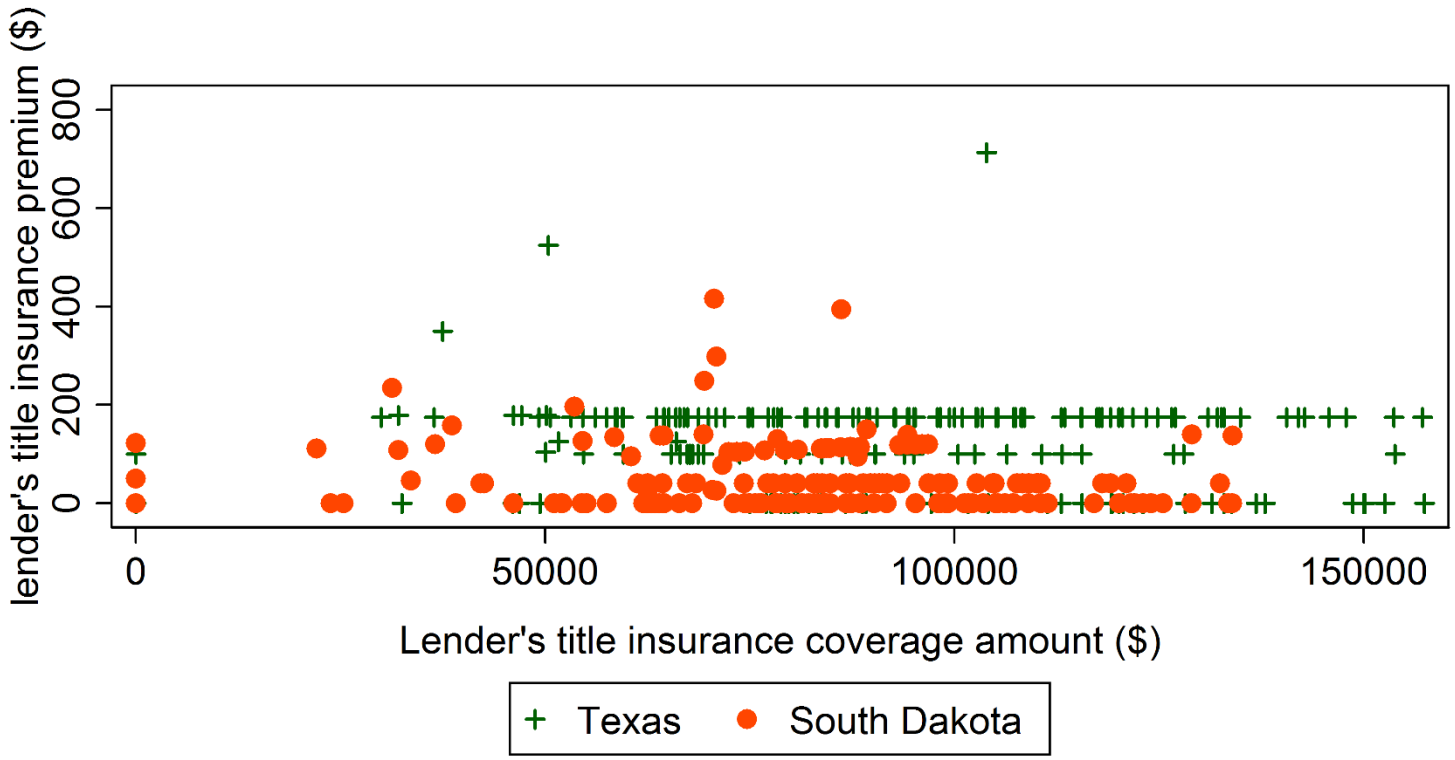
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.41 Comparison of Lender's Premium Between Texas and South Carolir



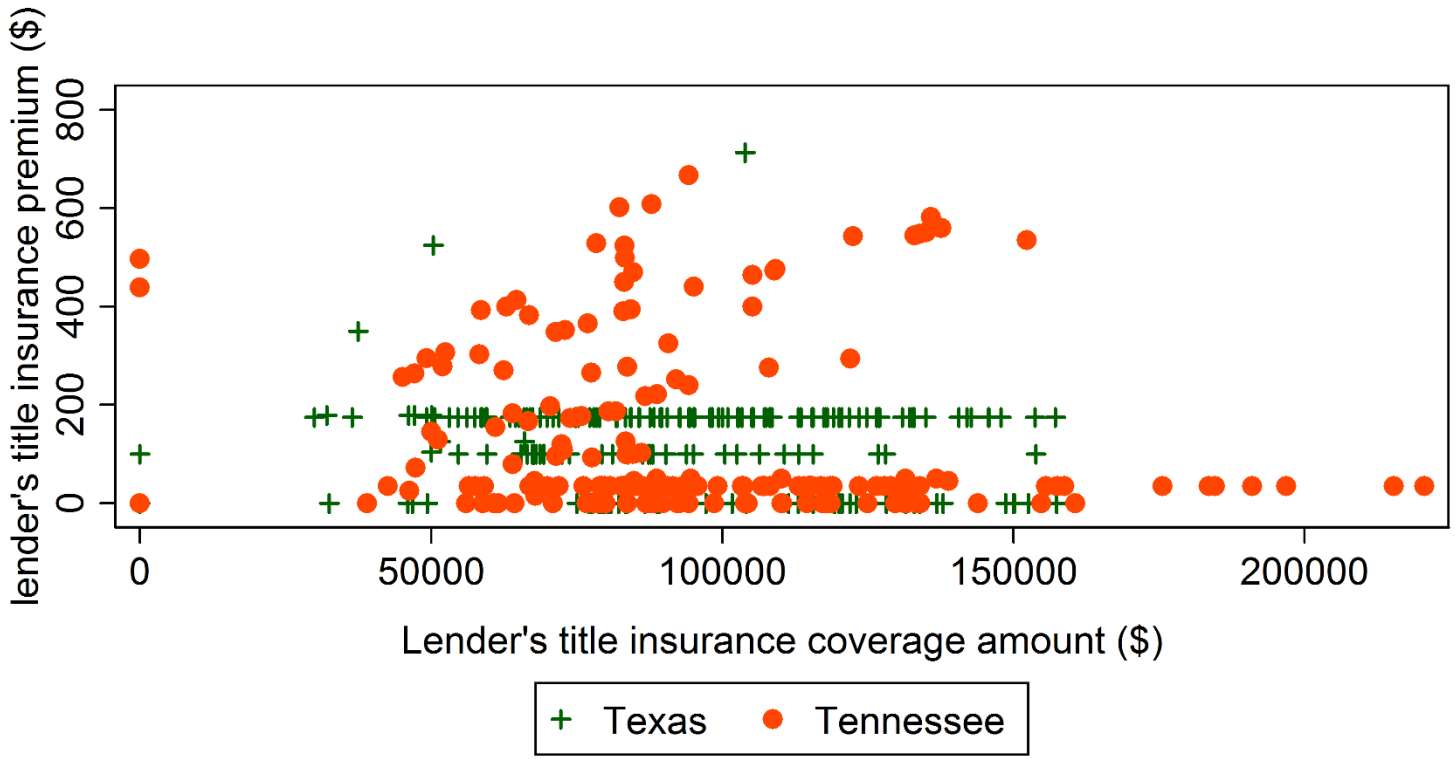
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.42 Comparison of Lender's Premium Between Texas and South Dakota



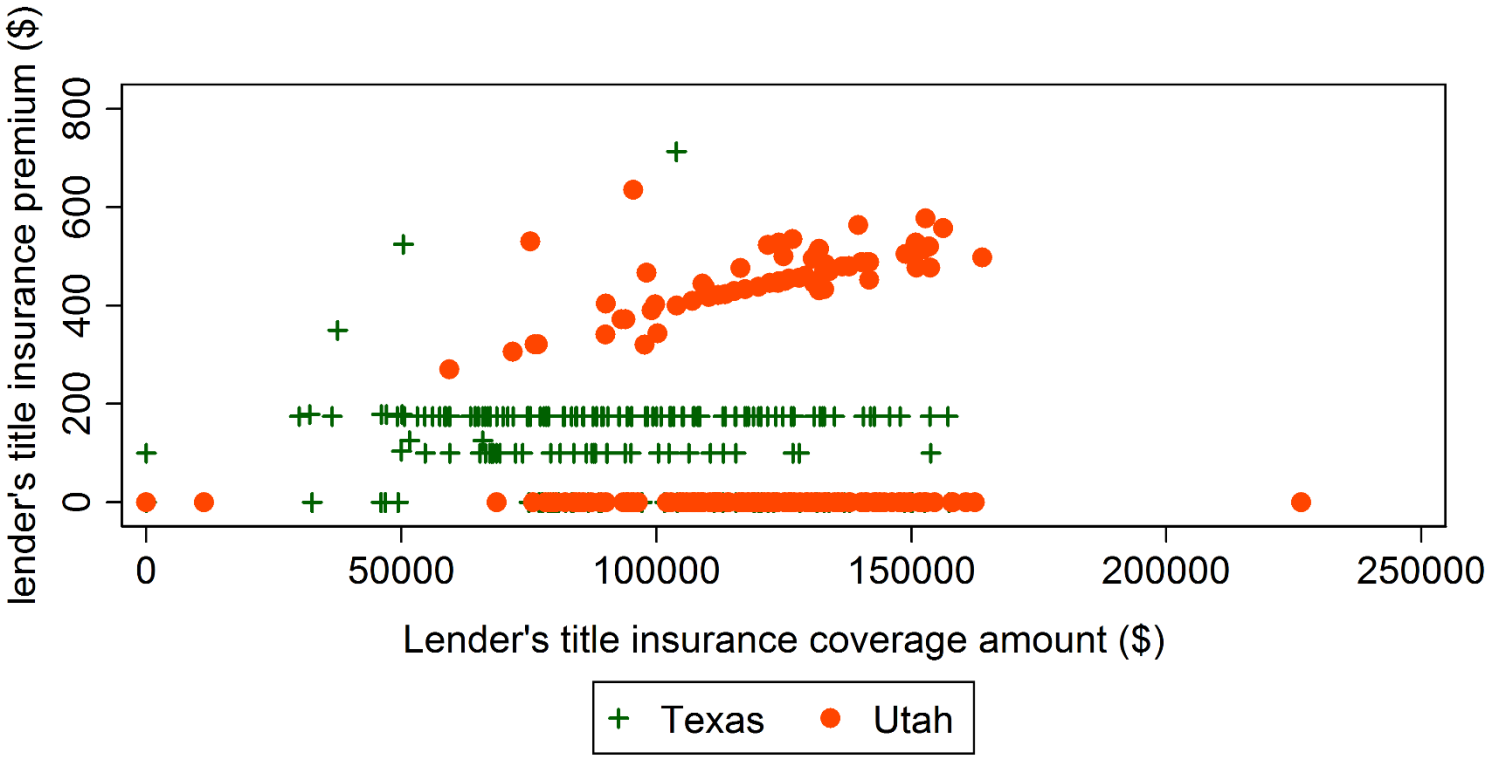
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.43 Comparison of Lender's Premium Between Texas and Tennessee



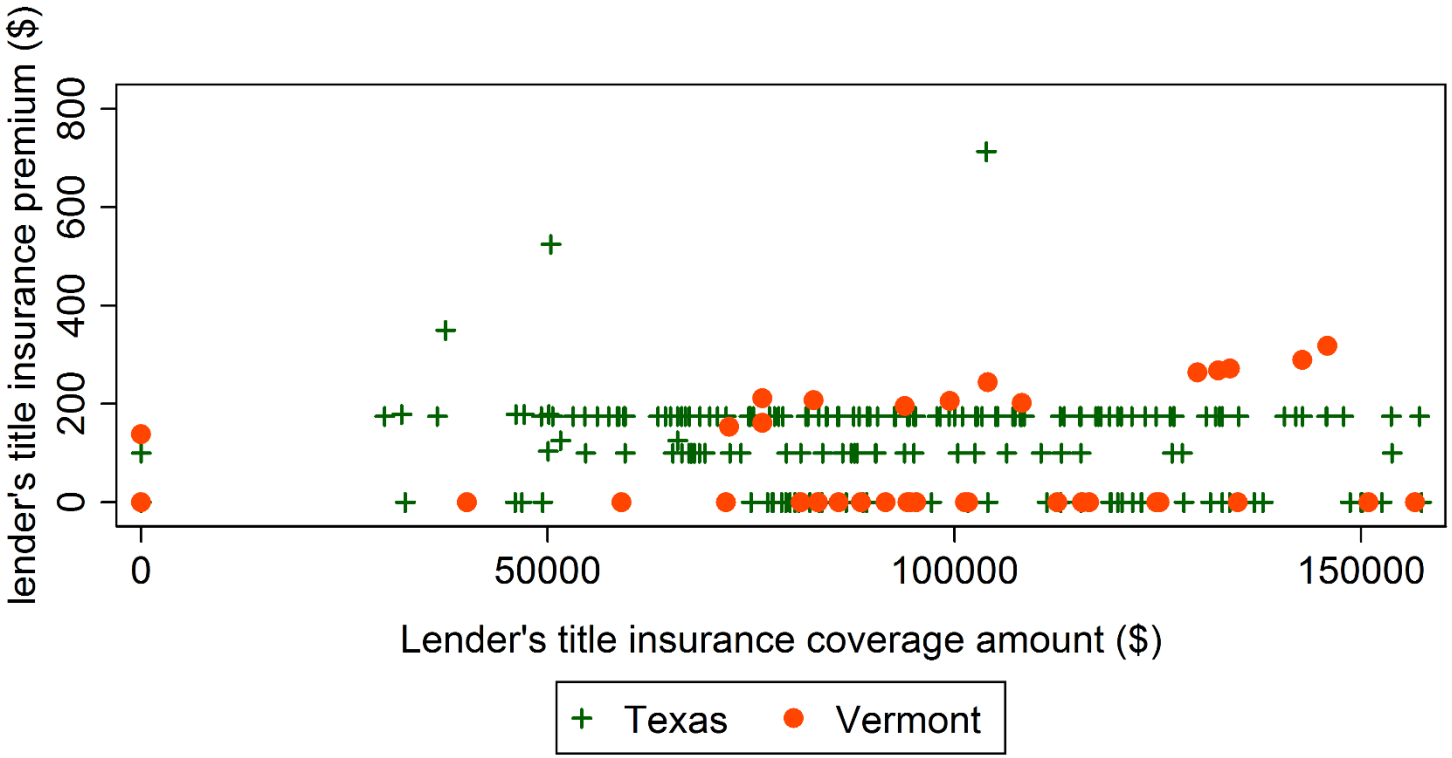
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.44 Comparison of Lender's Premium Between Texas and Utah



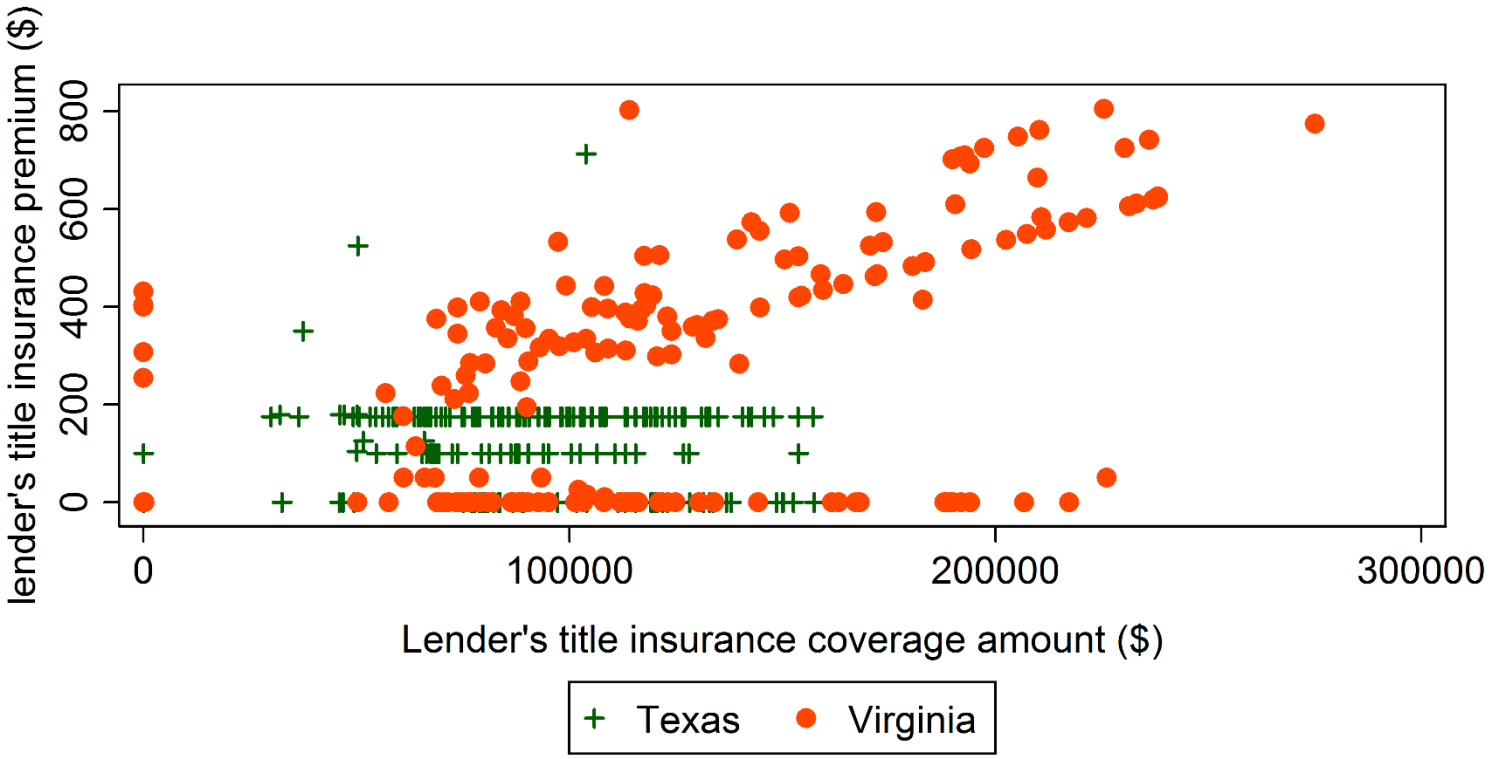
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.45 Comparison of Lender's Premium Between Texas and Vermont



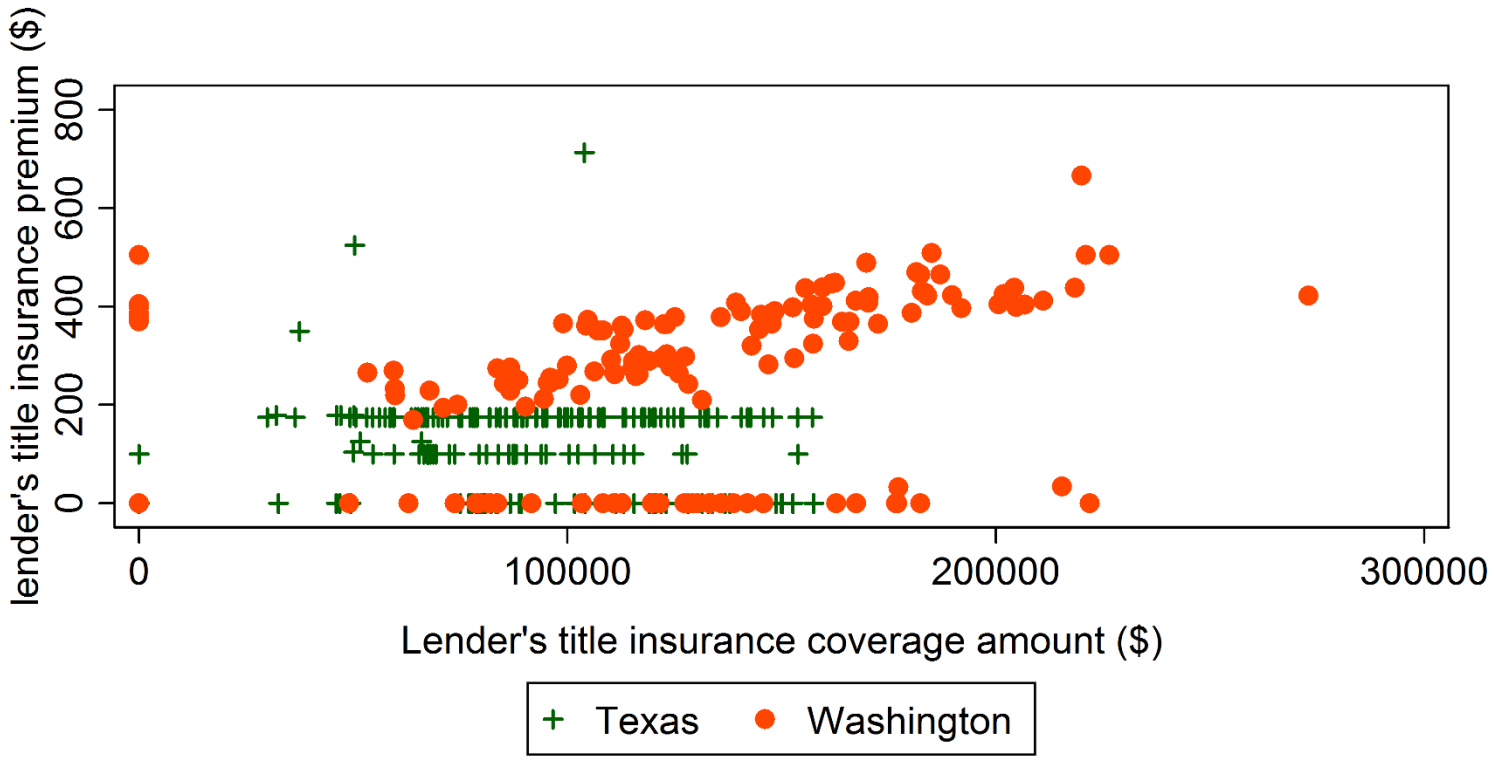
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.46 Comparison of Lender's Premium Between Texas and Virginia



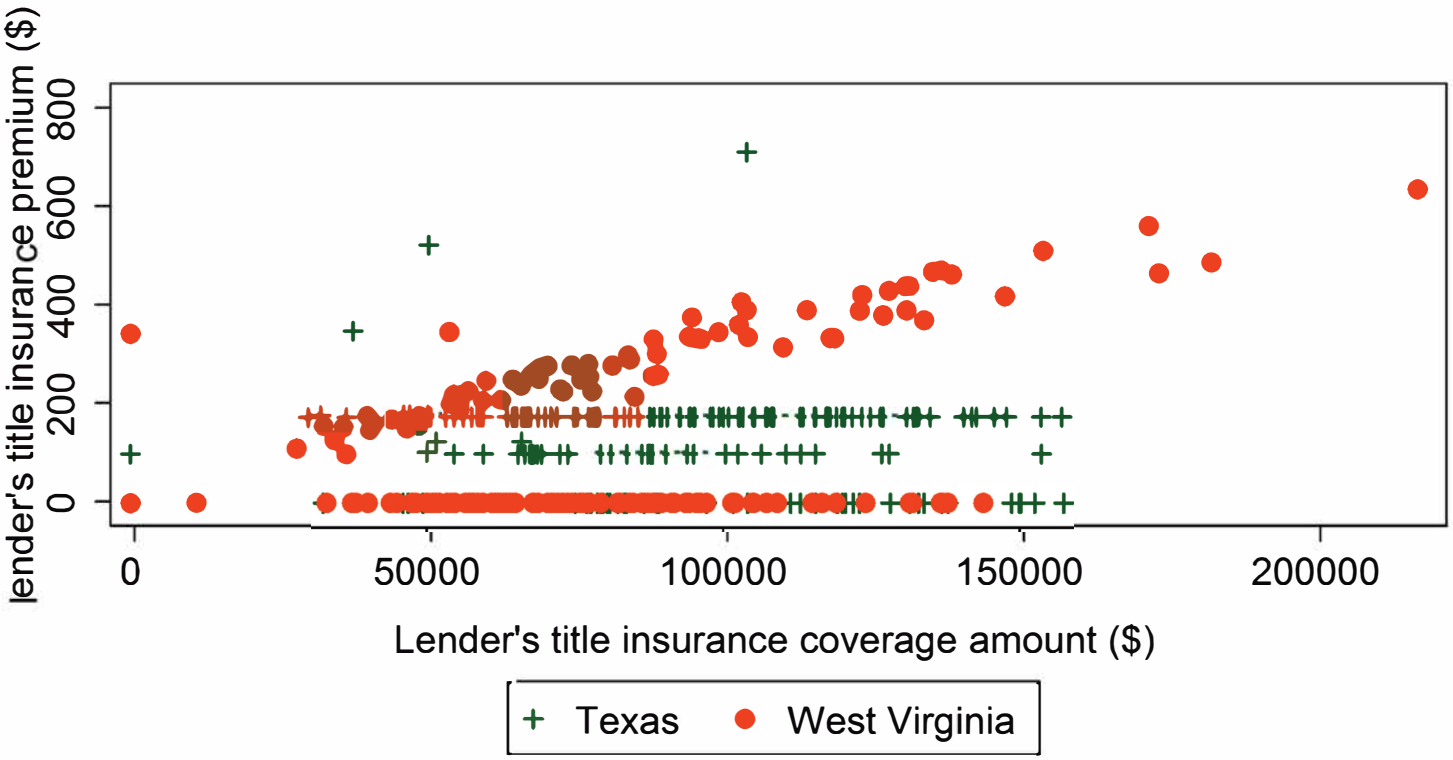
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.47 Comparison of Lender's Premium Between Texas and Washingtor



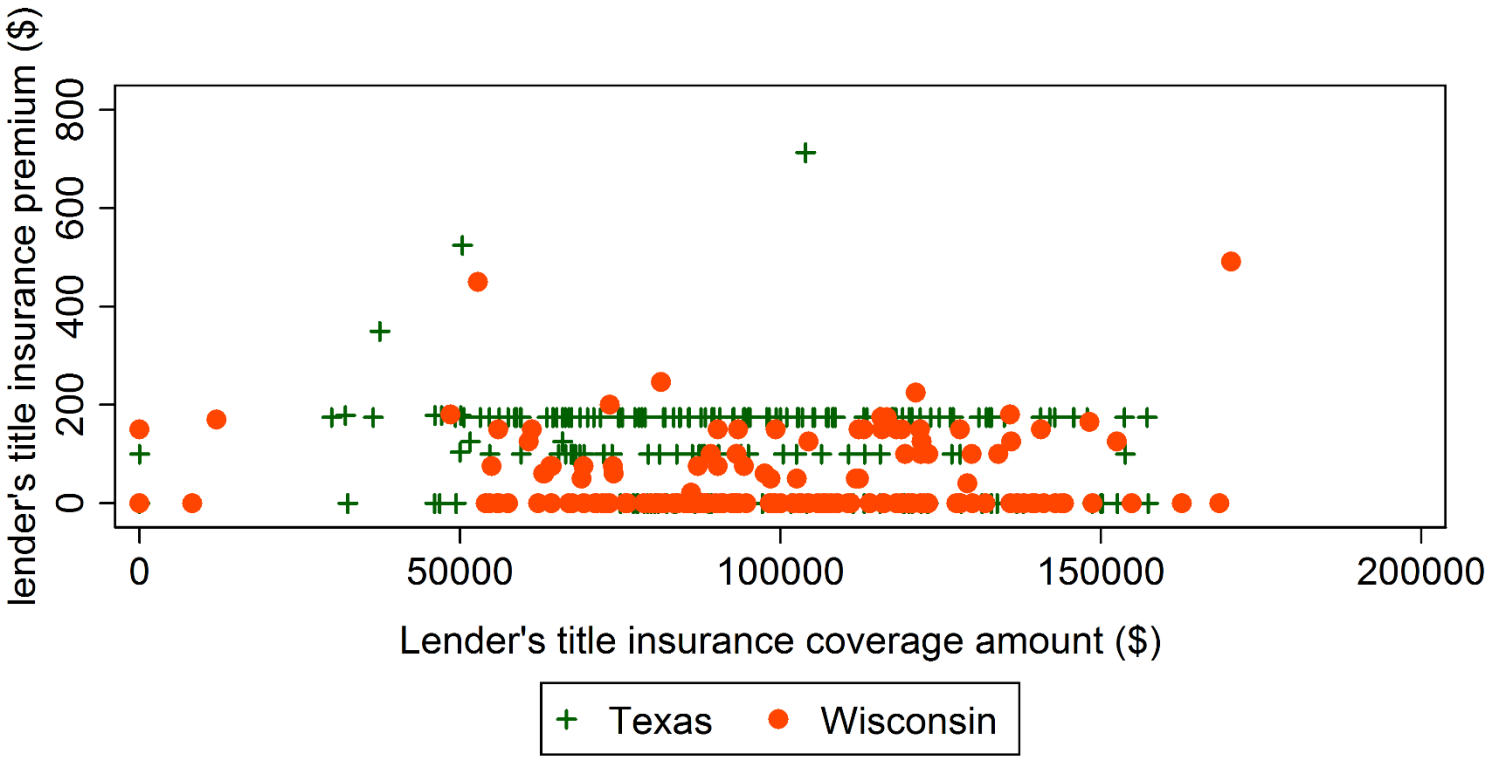
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.48 Comparison of Lender's Premium Between Texas and West Virginia



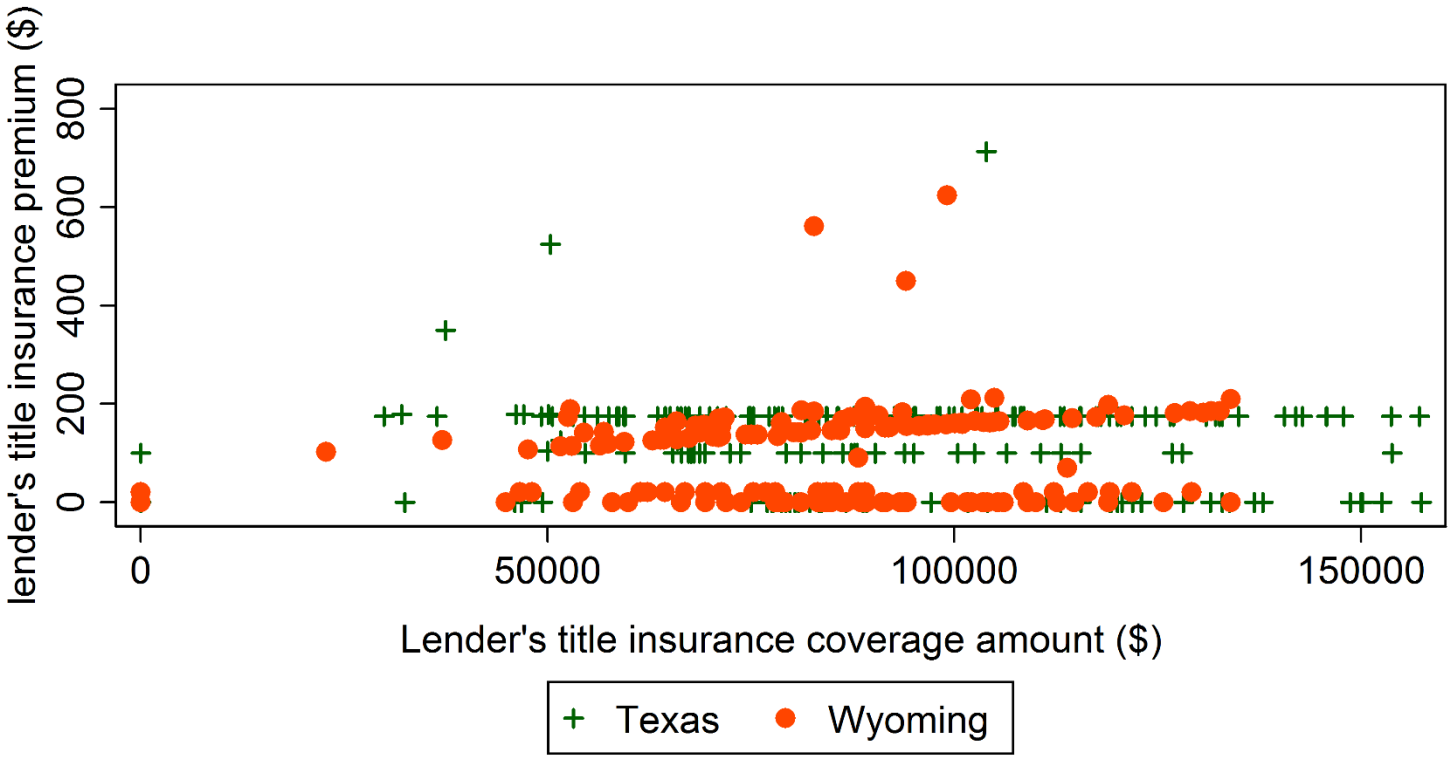
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.49 Comparison of Lender's Premium Between Texas and Wisconsin



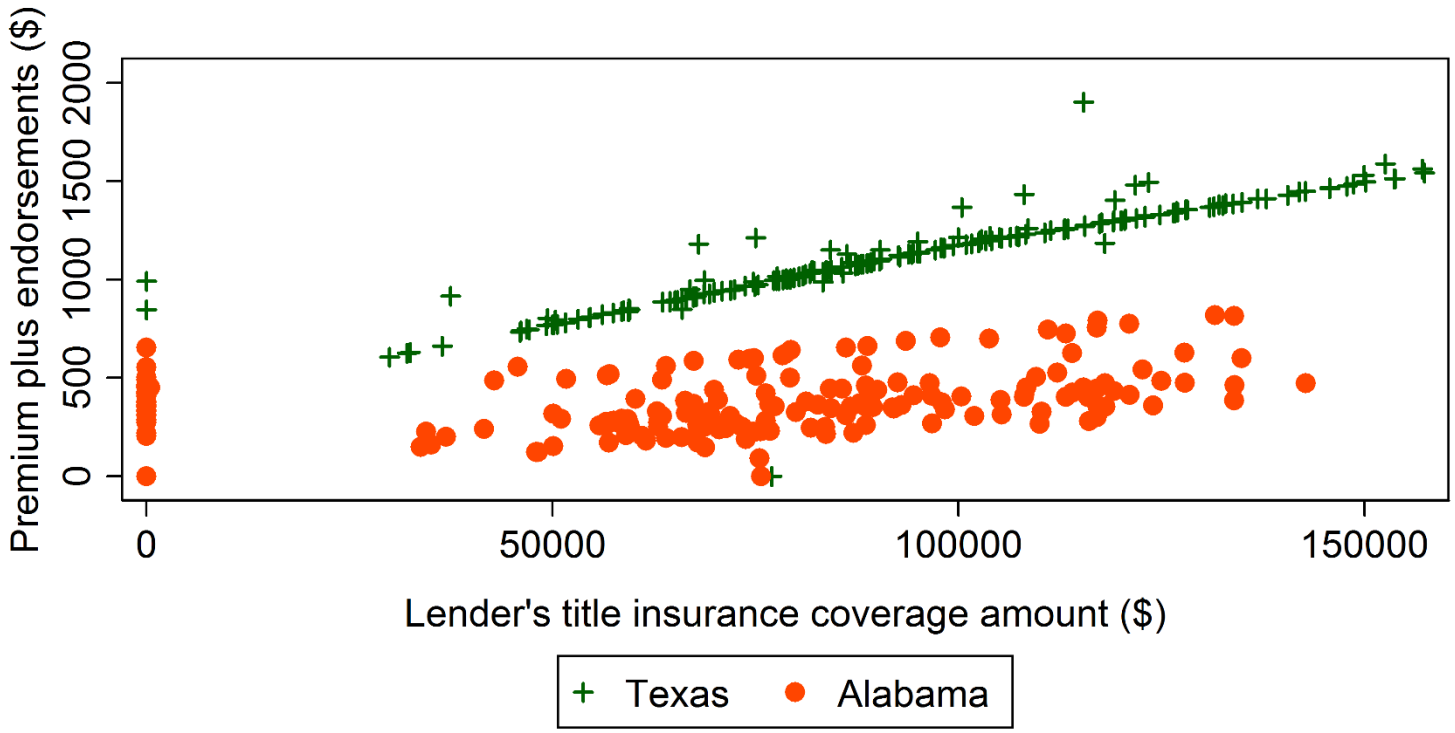
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.5.50 Comparison of Lender's Premium Between Texas and Wyoming



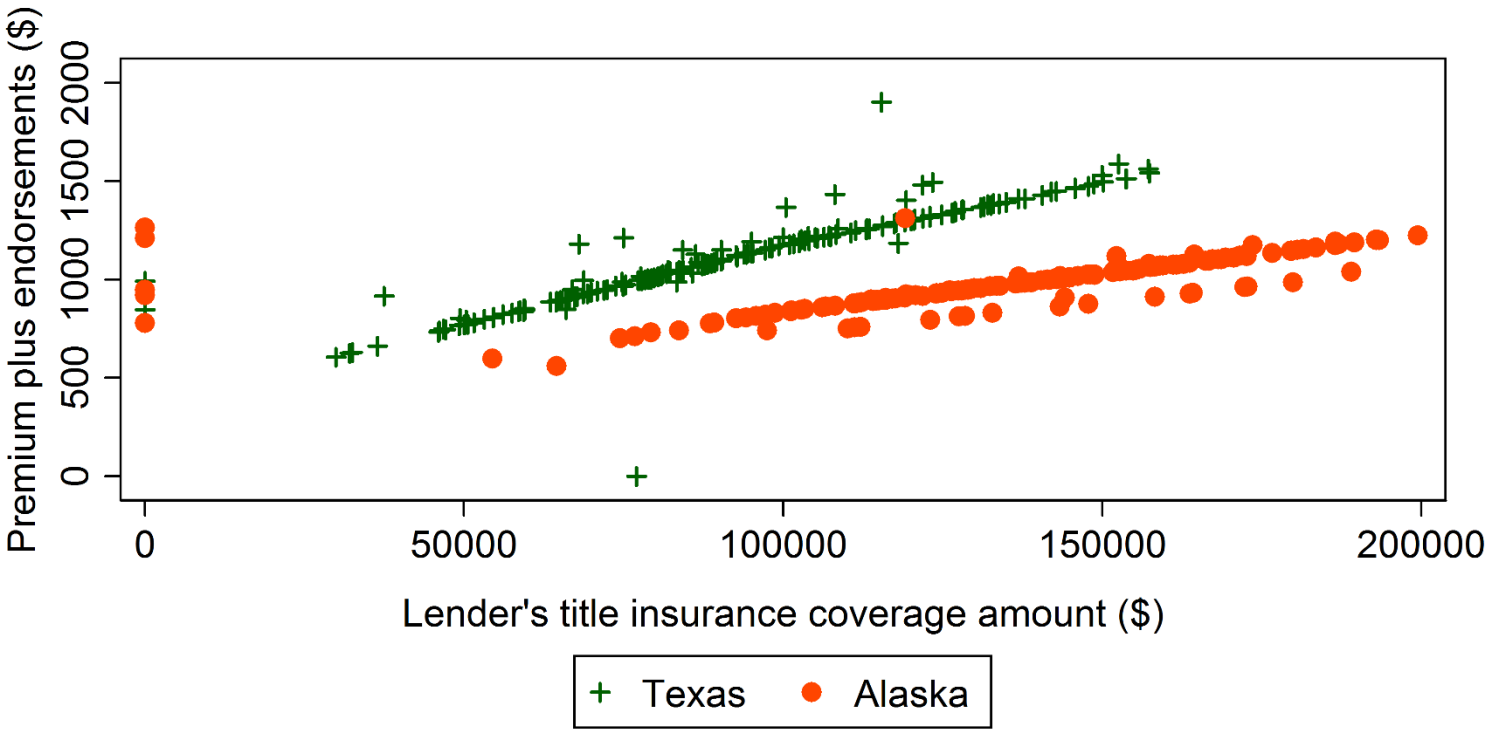
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.1 Comparison of Premium Plus Endorsement Between TX and AL



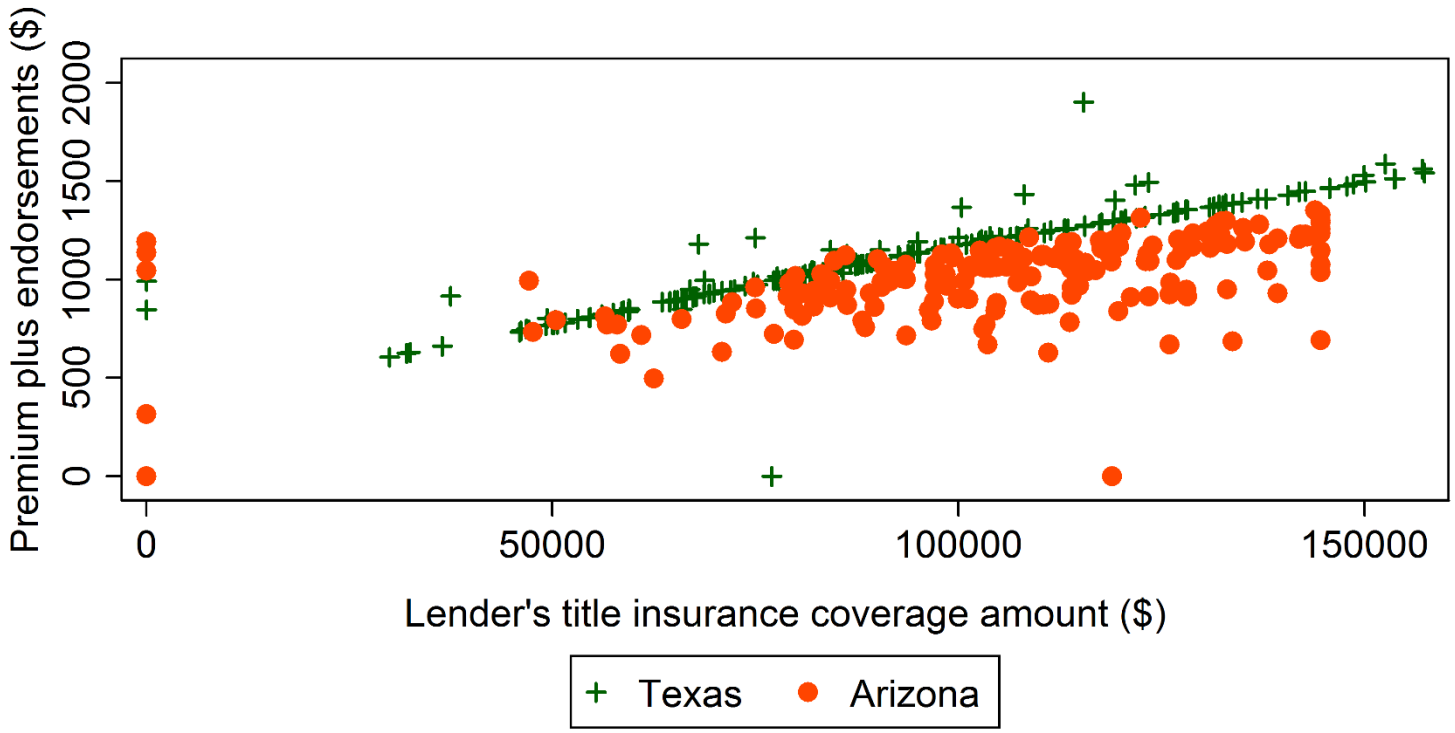
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.2 Comparison of Premium Plus Endorsement Between TX and AK



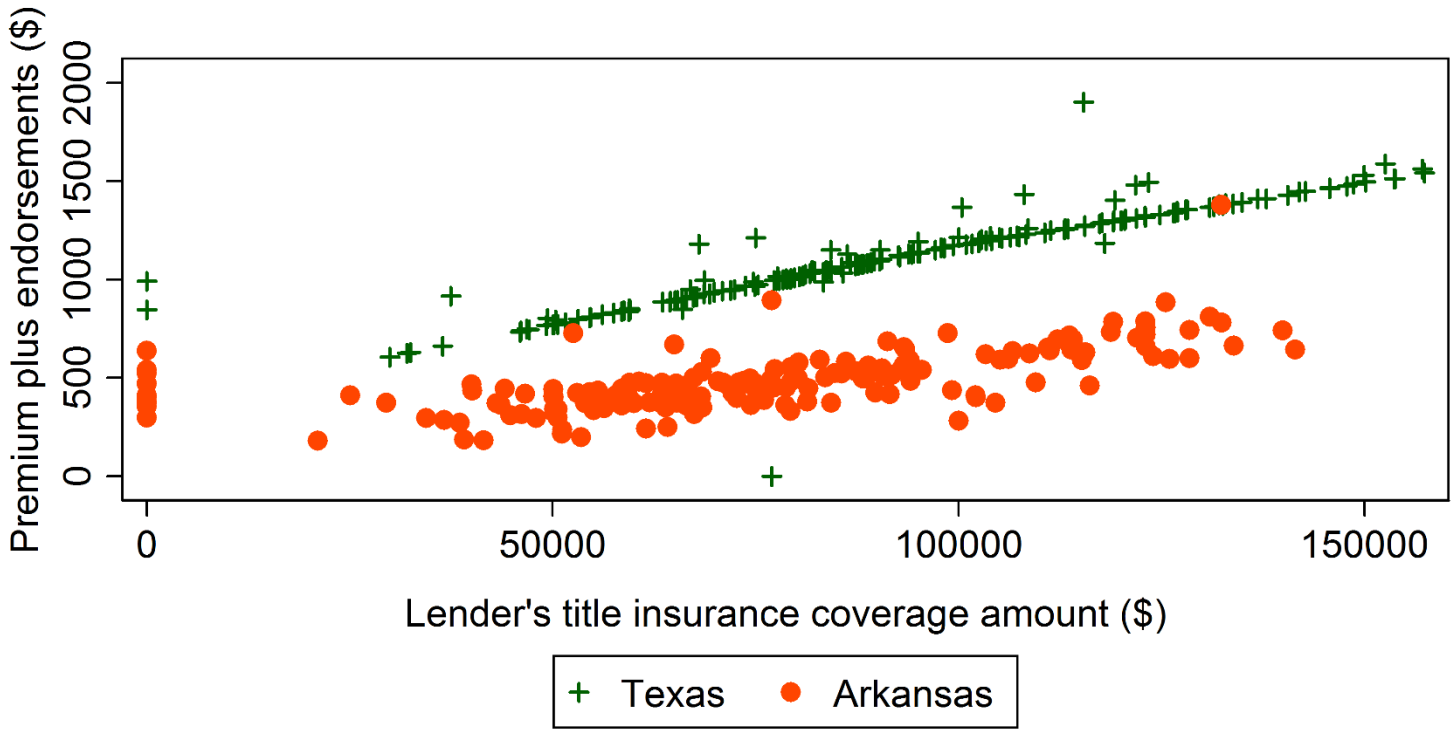
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.3 Comparison of Premium Plus Endorsement Between TX and AZ



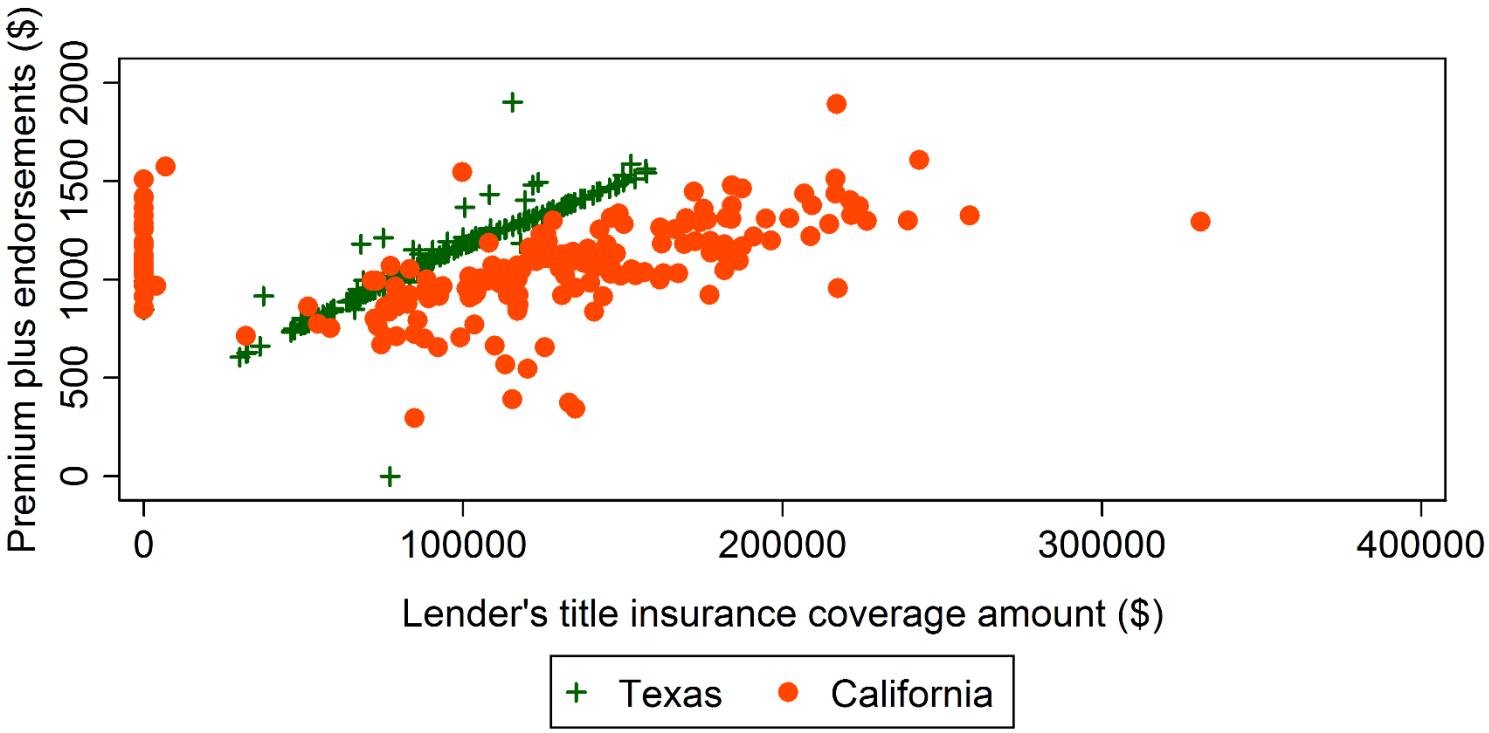
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.4 Comparison of Premium Plus Endorsement Between TX and AR



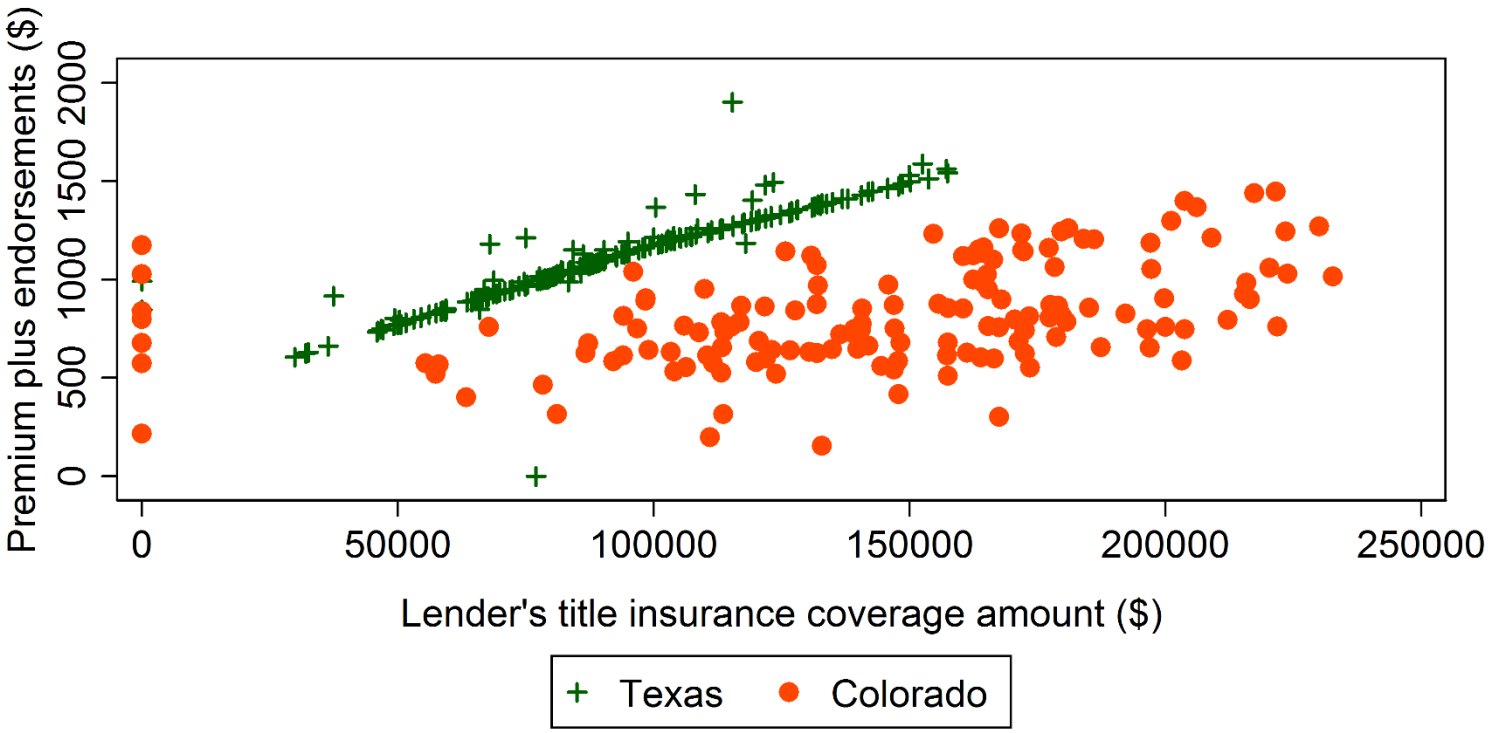
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.5 Comparison of Premium Plus Endorsement Between TX and CA



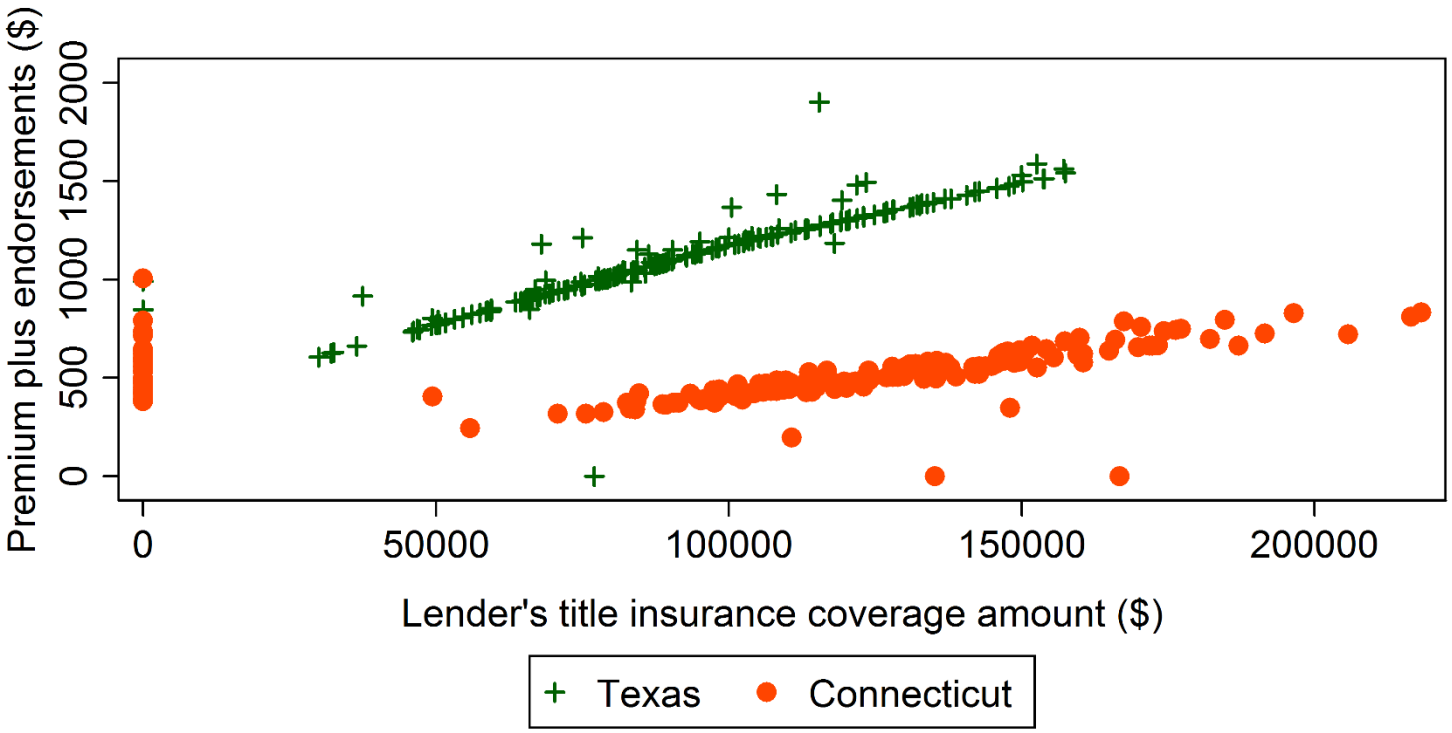
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.6 Comparison of Premium Plus Endorsement Between TX and CO



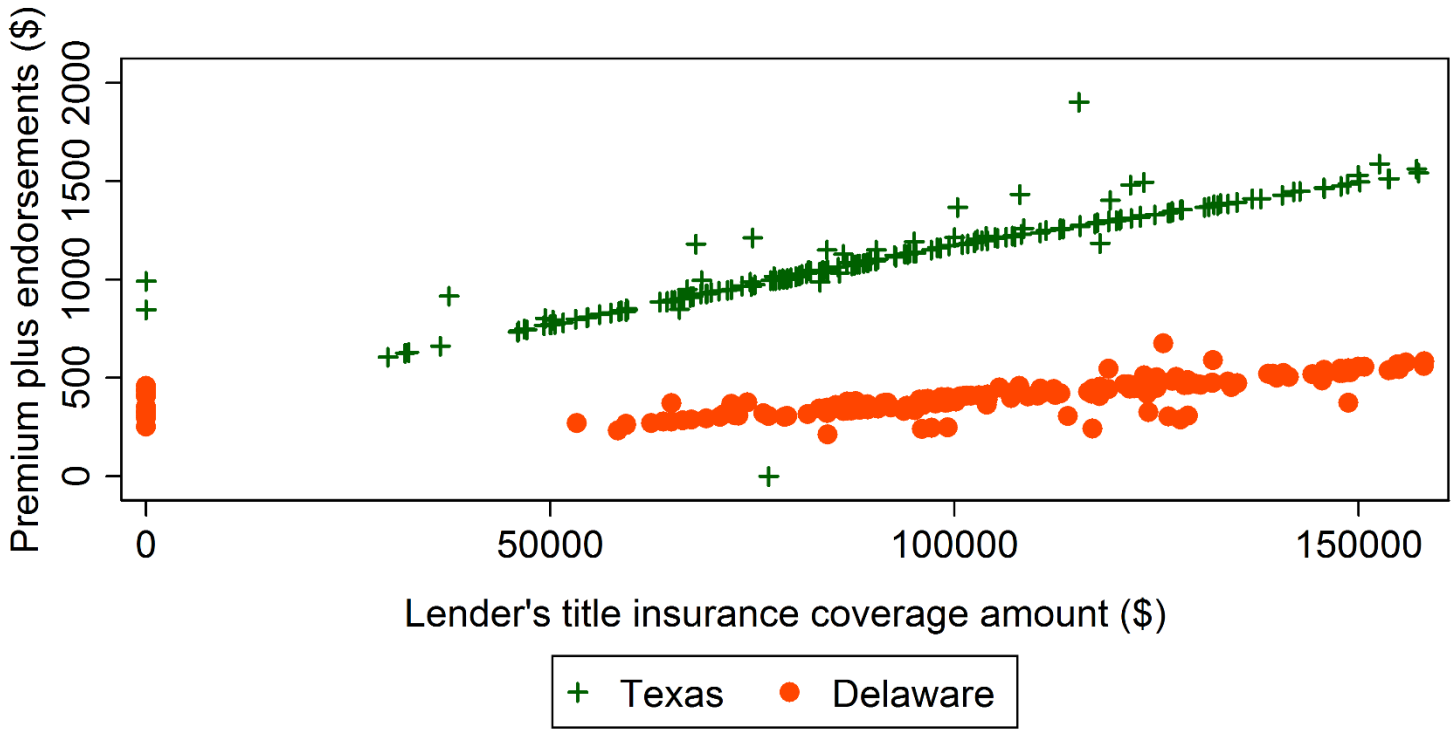
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.7 Comparison of Premium Plus Endorsement Between TX and CT



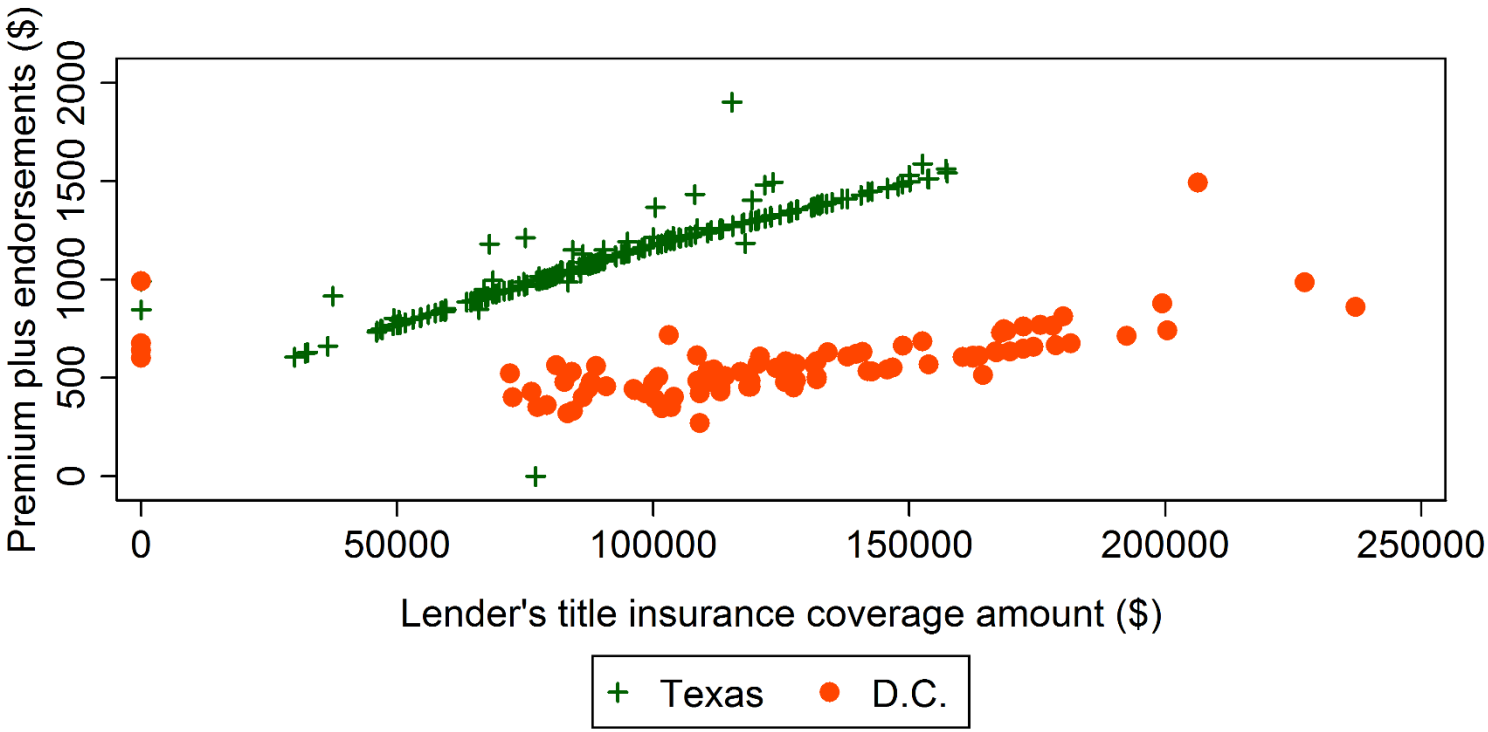
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.8 Comparison of Premium Plus Endorsement Between TX and DE



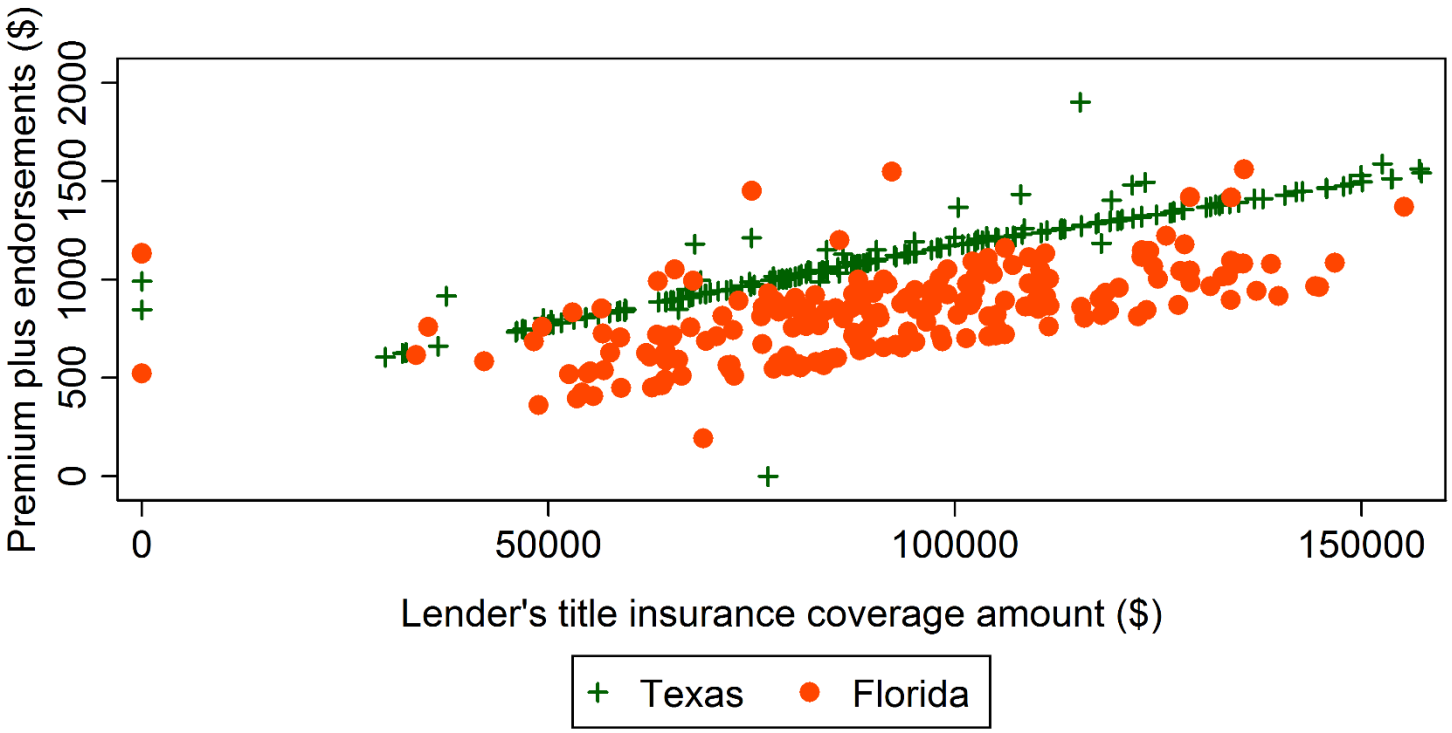
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.9 Comparison of Premium Plus Endorsement Between TX and D.C



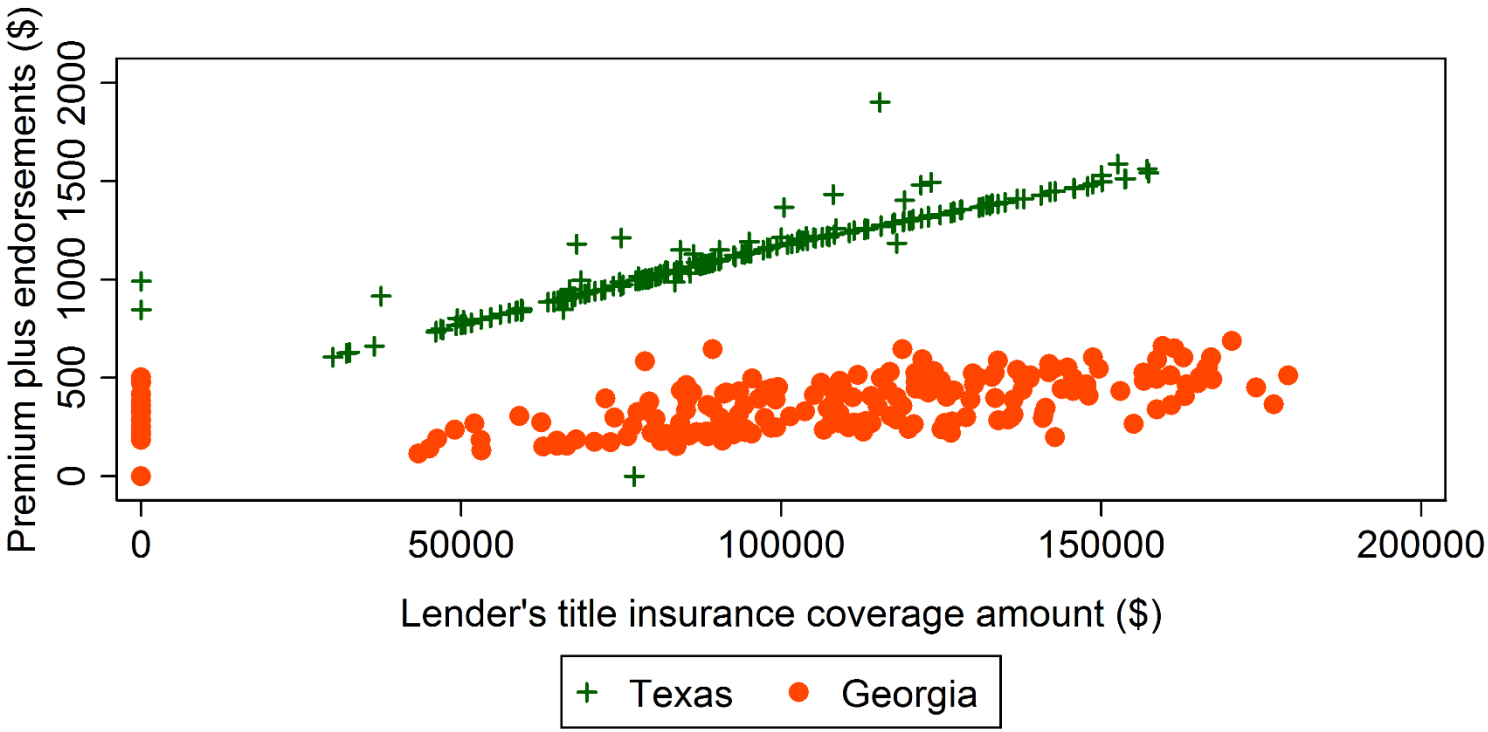
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.10 Comparison of Premium Plus Endorsement Between TX and FL



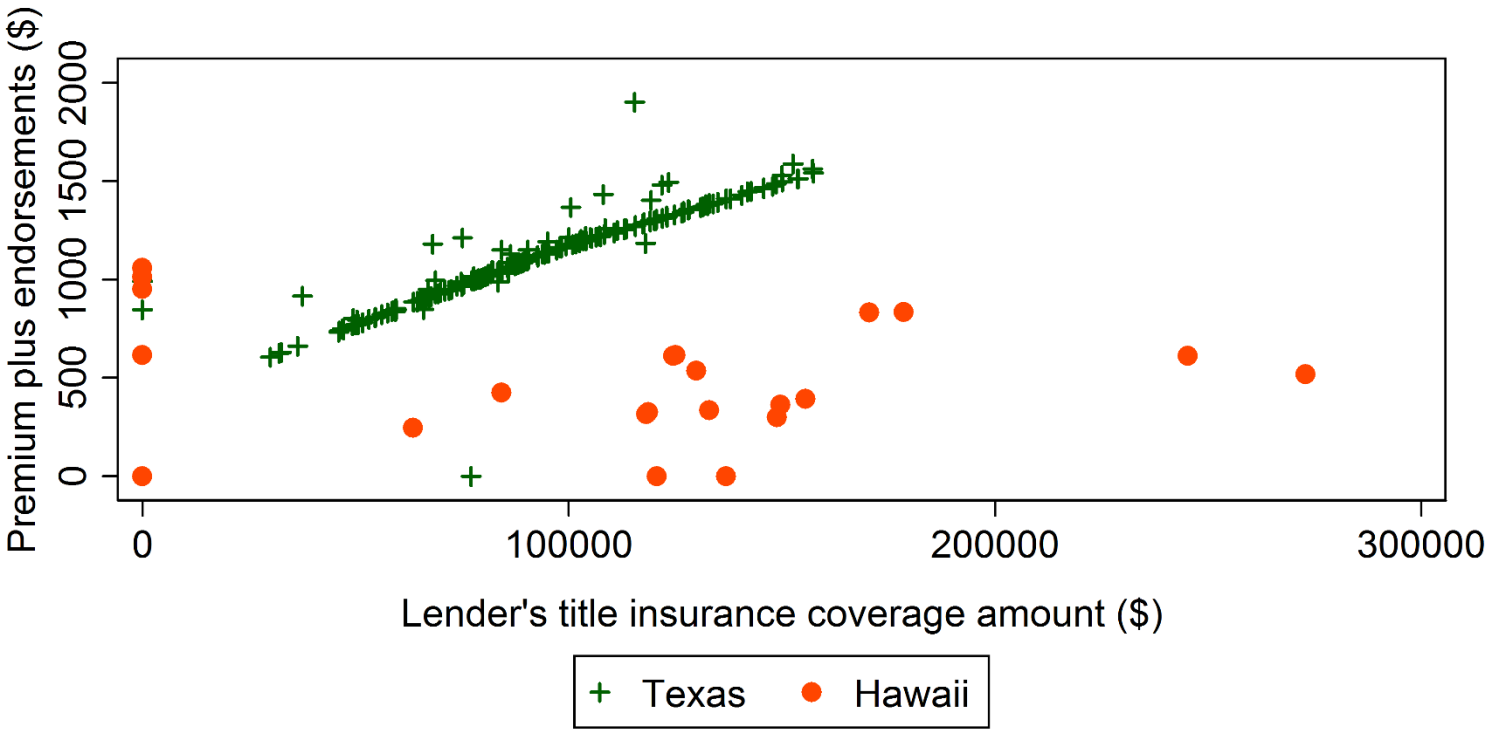
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.11 Comparison of Premium Plus Endorsement Between TX and GA



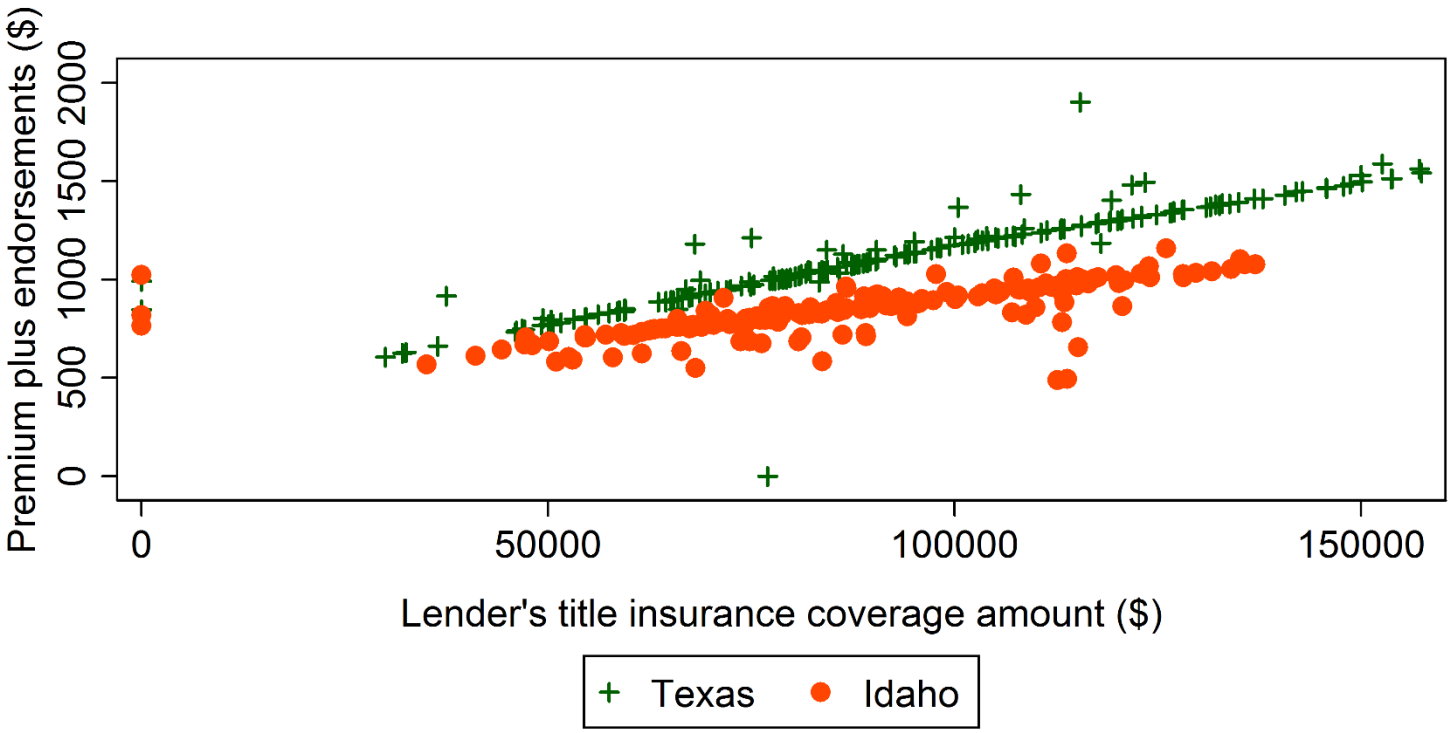
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.12 Comparison of Premium Plus Endorsement Between TX and HI



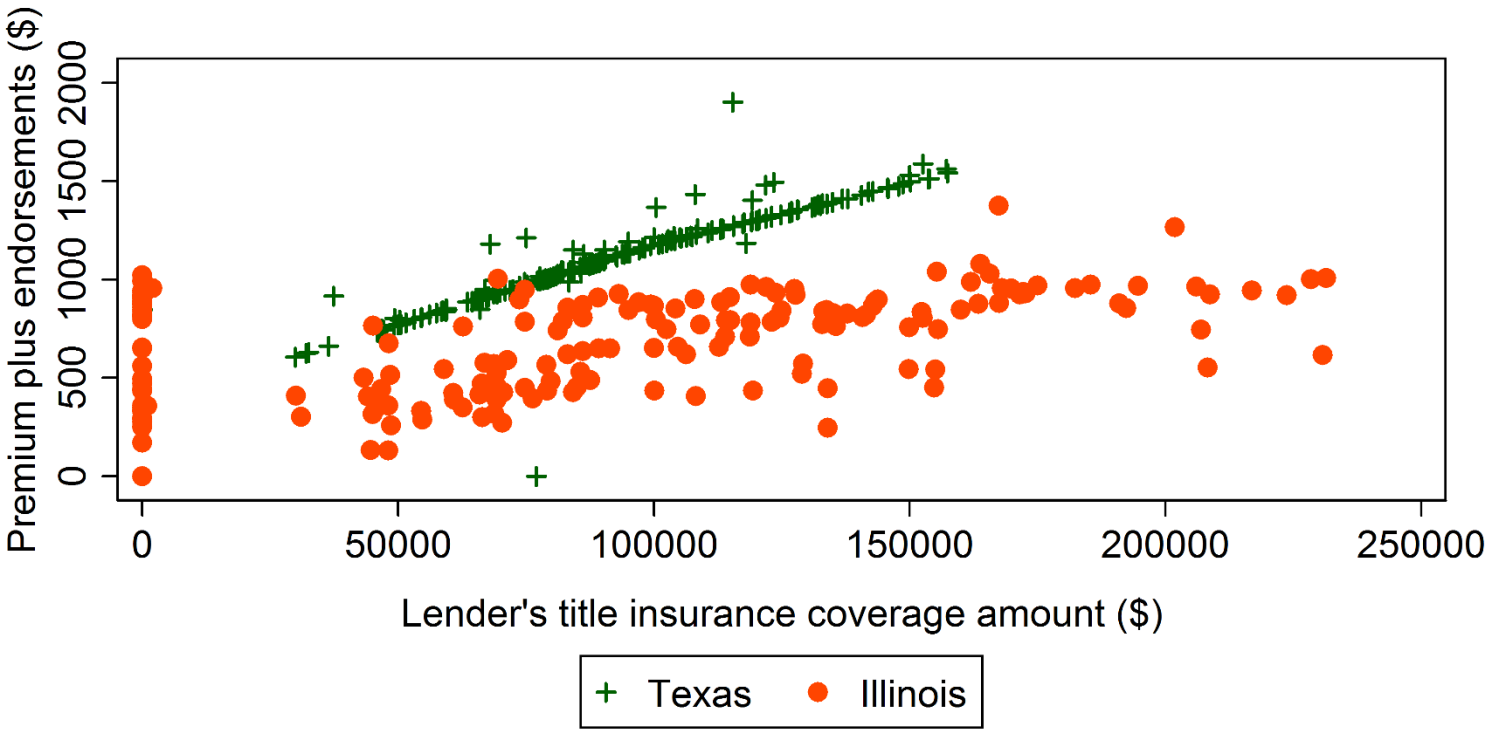
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.13 Comparison of Premium Plus Endorsement Between TX and ID



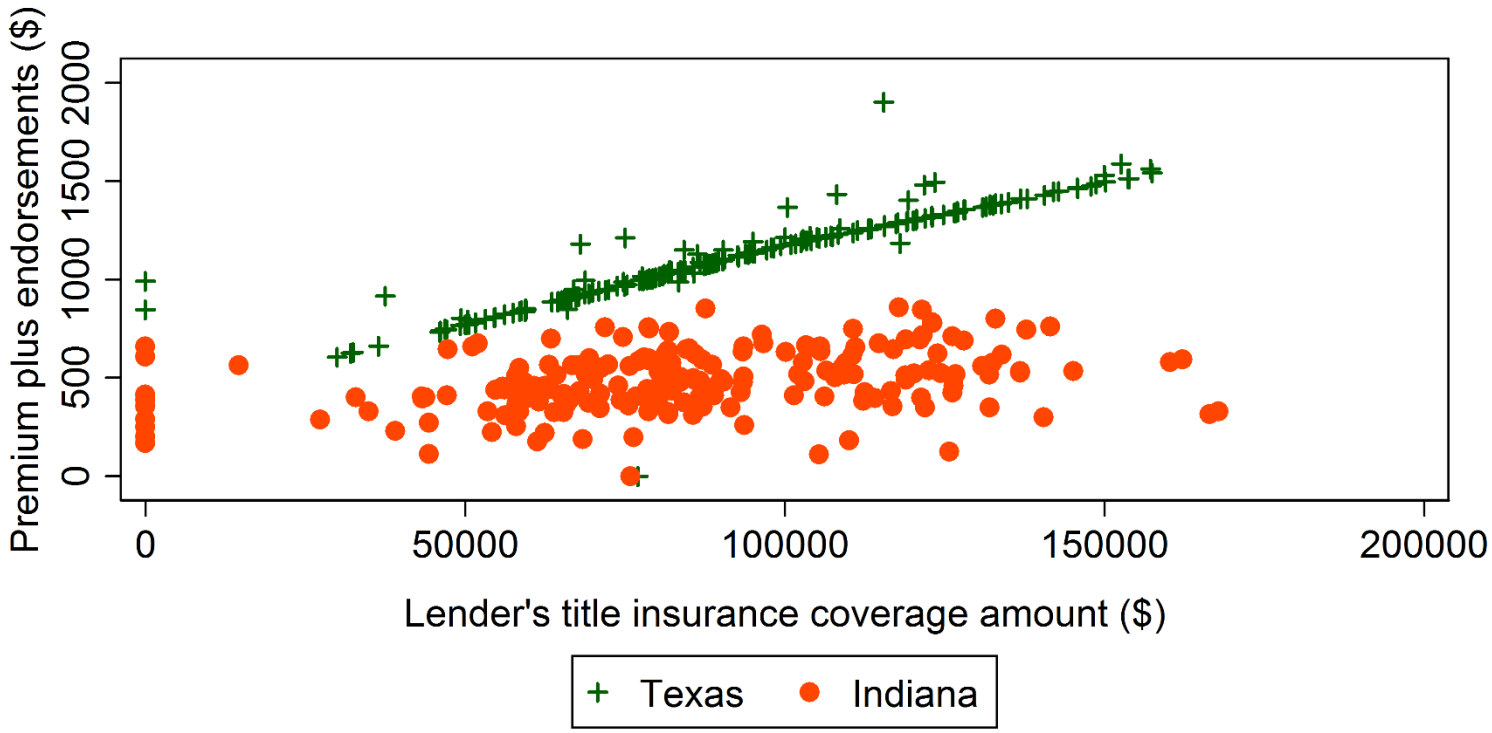
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.14 Comparison of Premium Plus Endorsement Between TX and IL



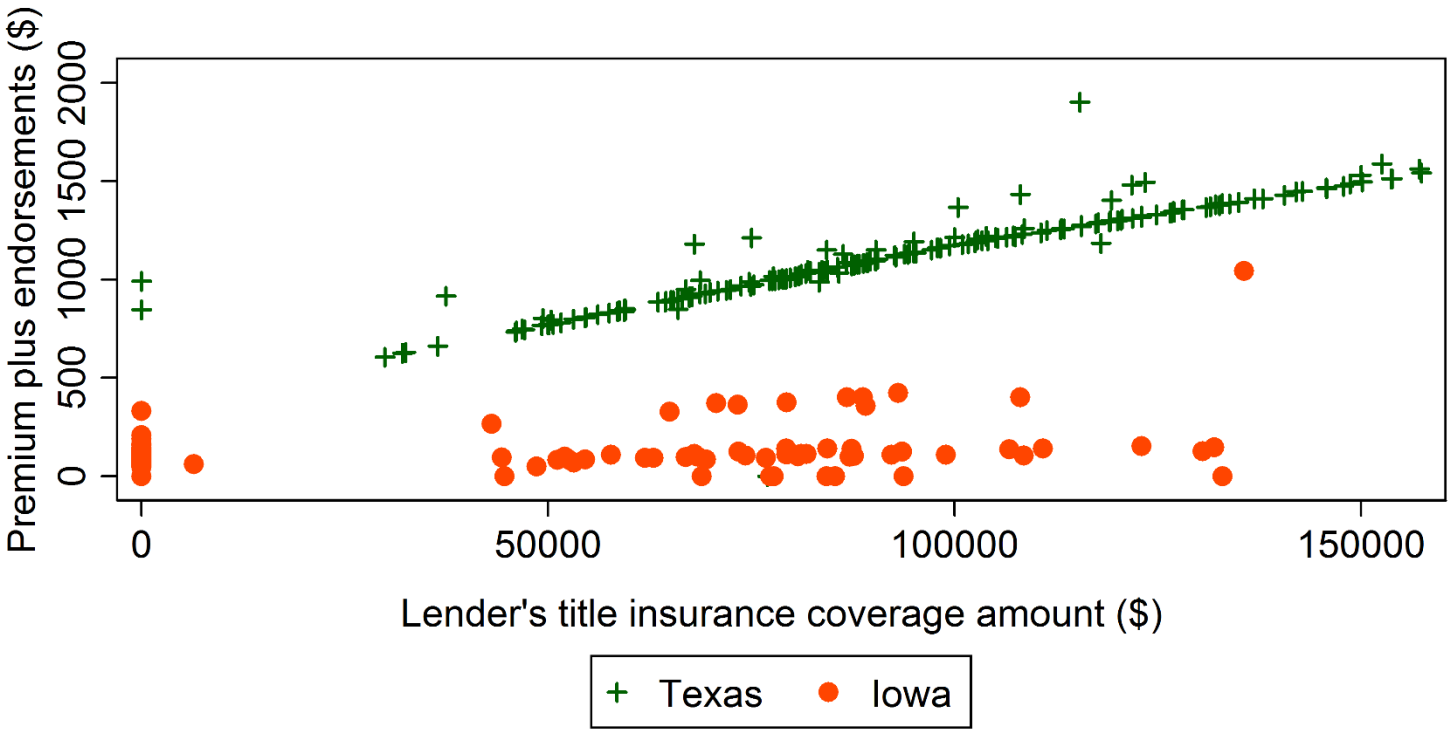
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.15 Comparison of Premium Plus Endorsement Between TX and IN



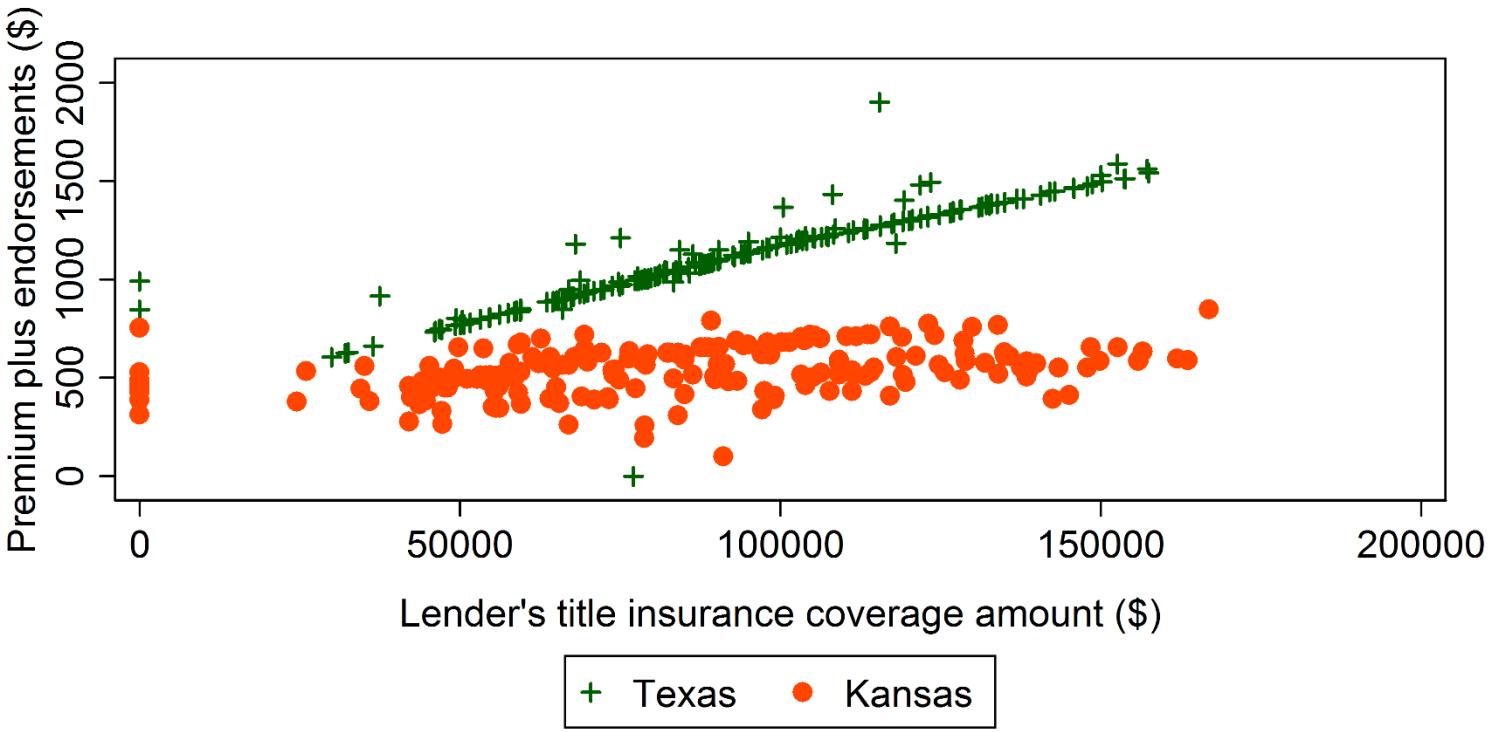
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.16 Comparison of Premium Plus Endorsement Between TX and IO



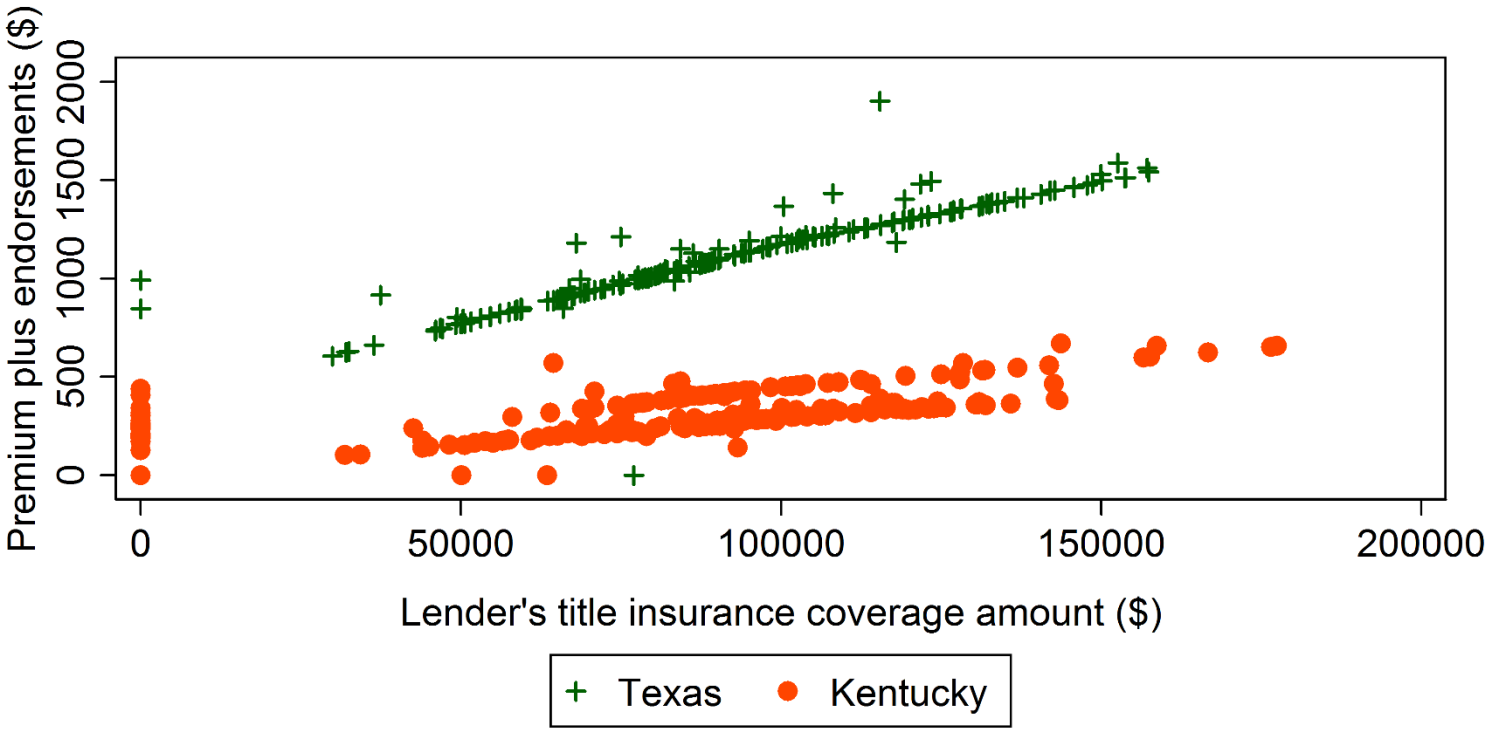
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.17 Comparison of Premium Plus Endorsement Between TX and KS



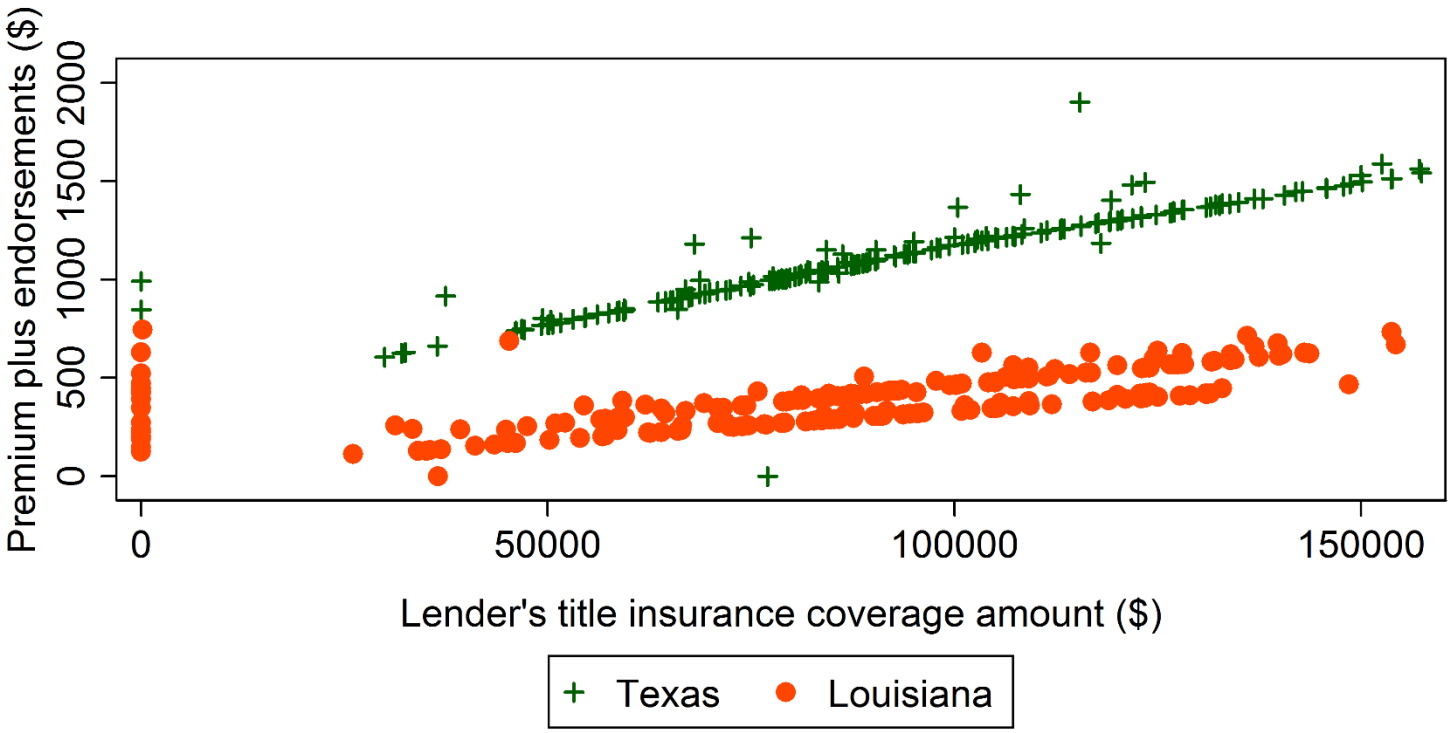
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.18 Comparison of Premium Plus Endorsement Between TX and KY



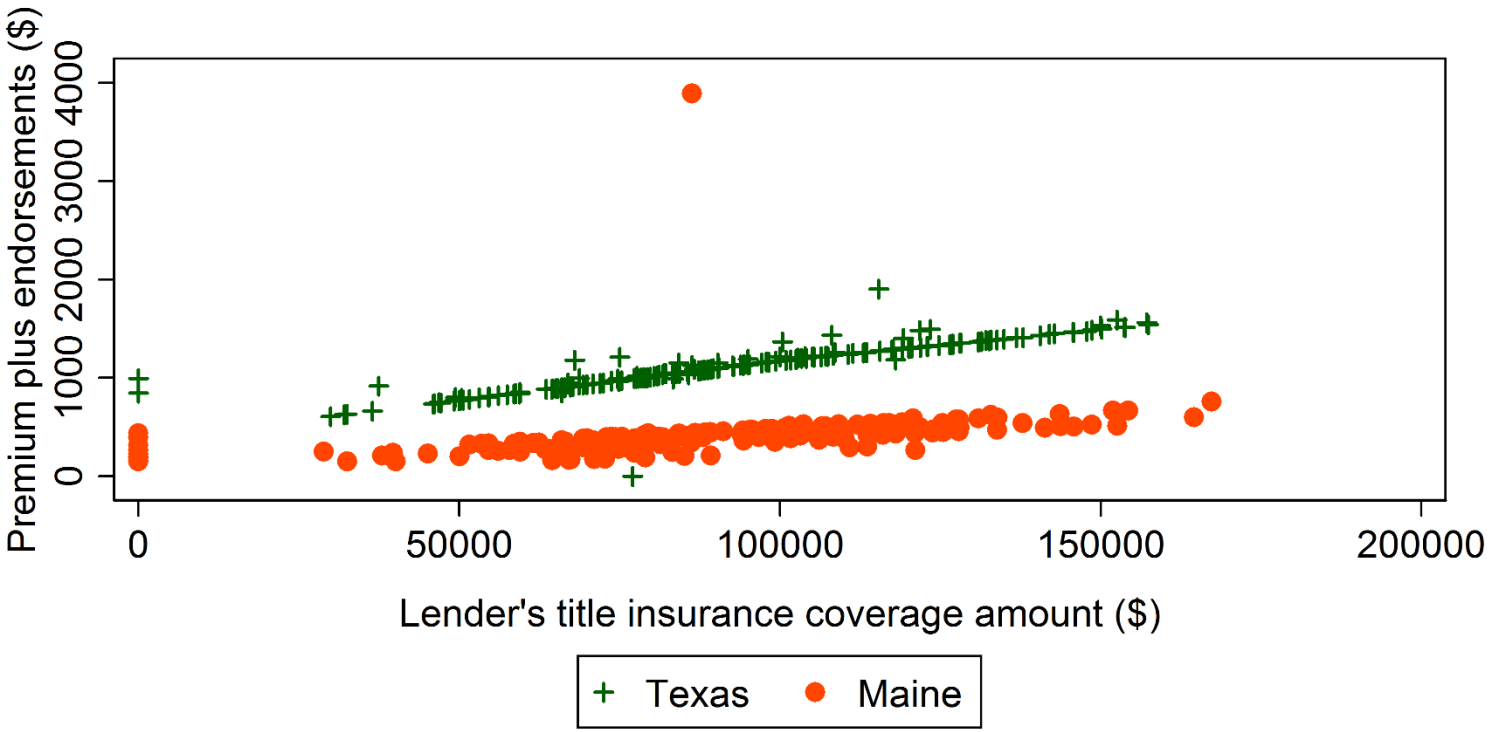
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.19 Comparison of Premium Plus Endorsement Between TX and LA



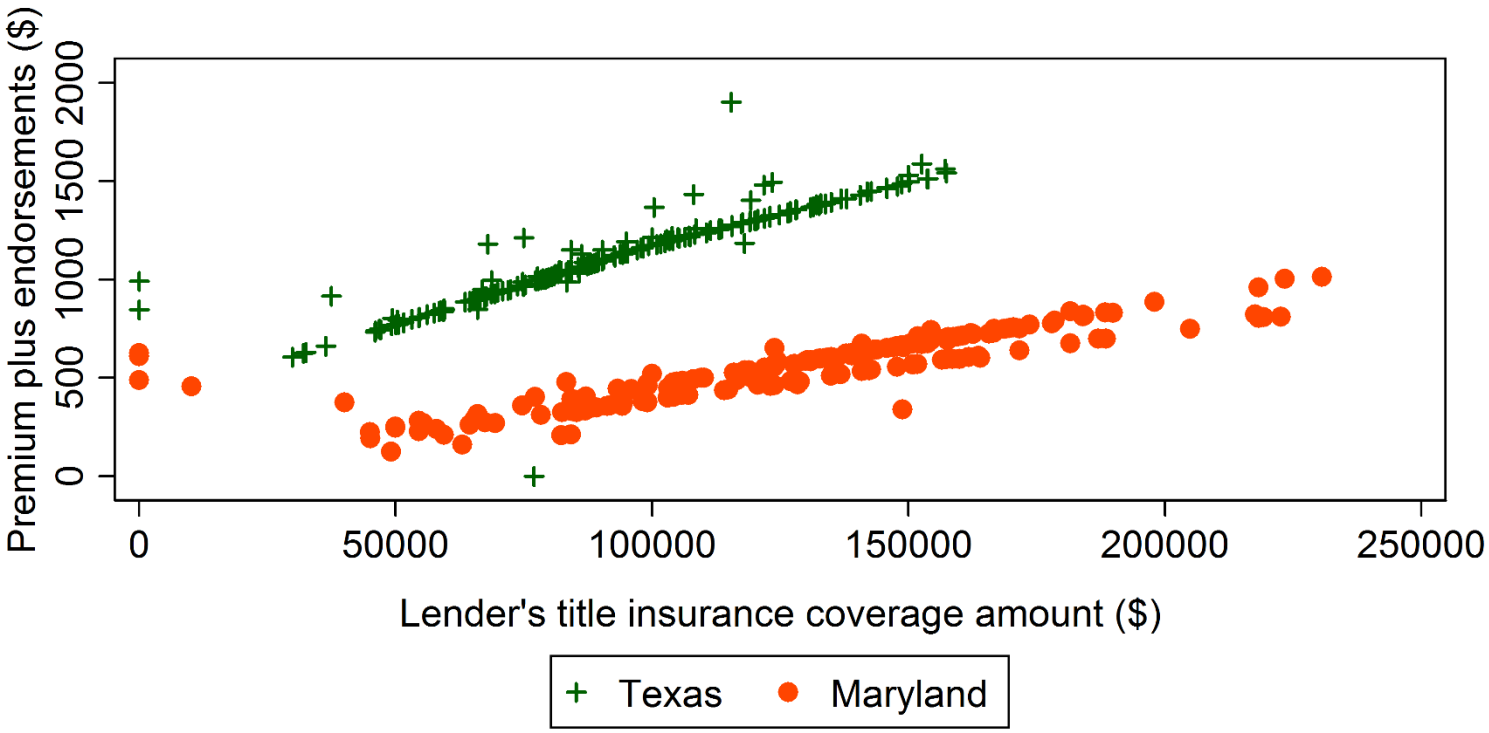
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.20 Comparison of Premium Plus Endorsement Between TX and ME



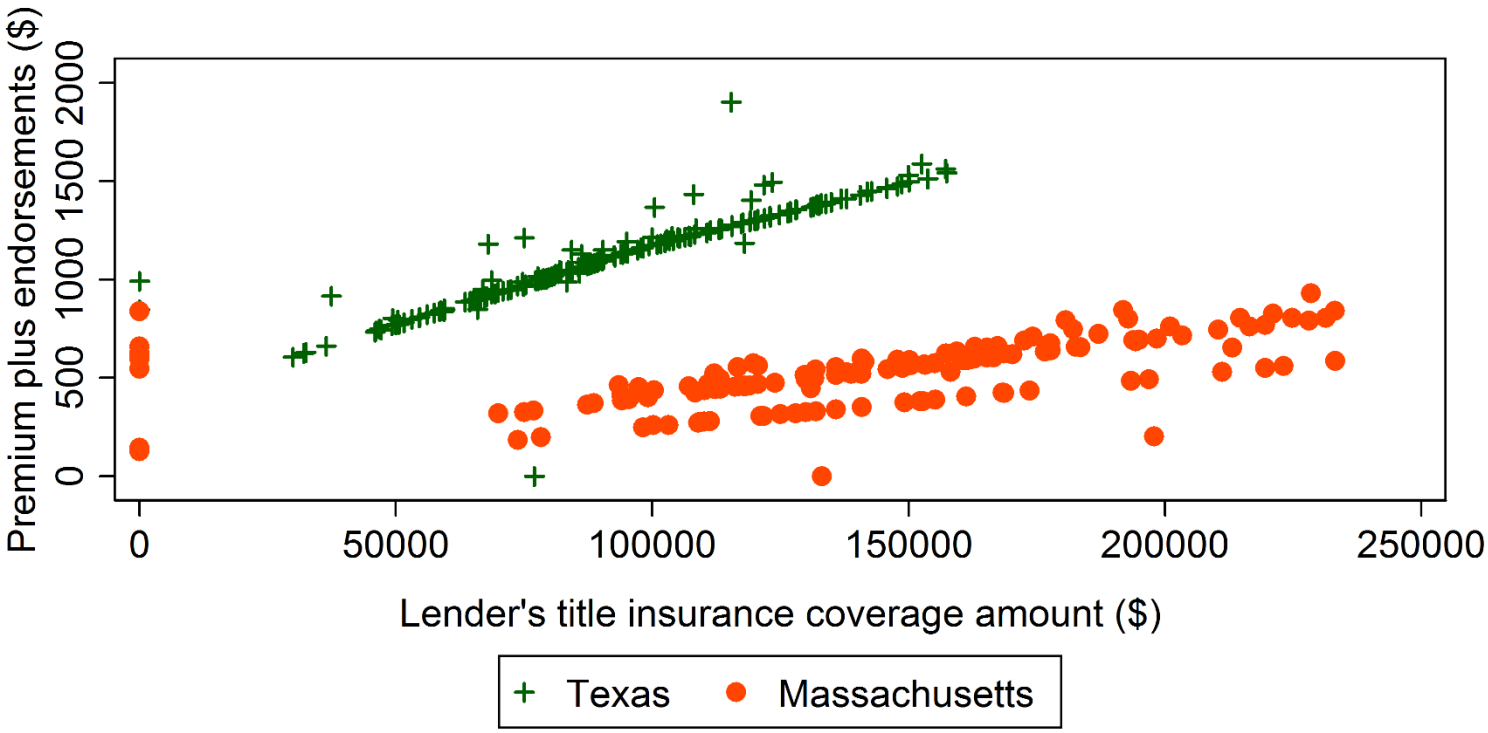
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.21 Comparison of Premium Plus Endorsement Between TX and MD



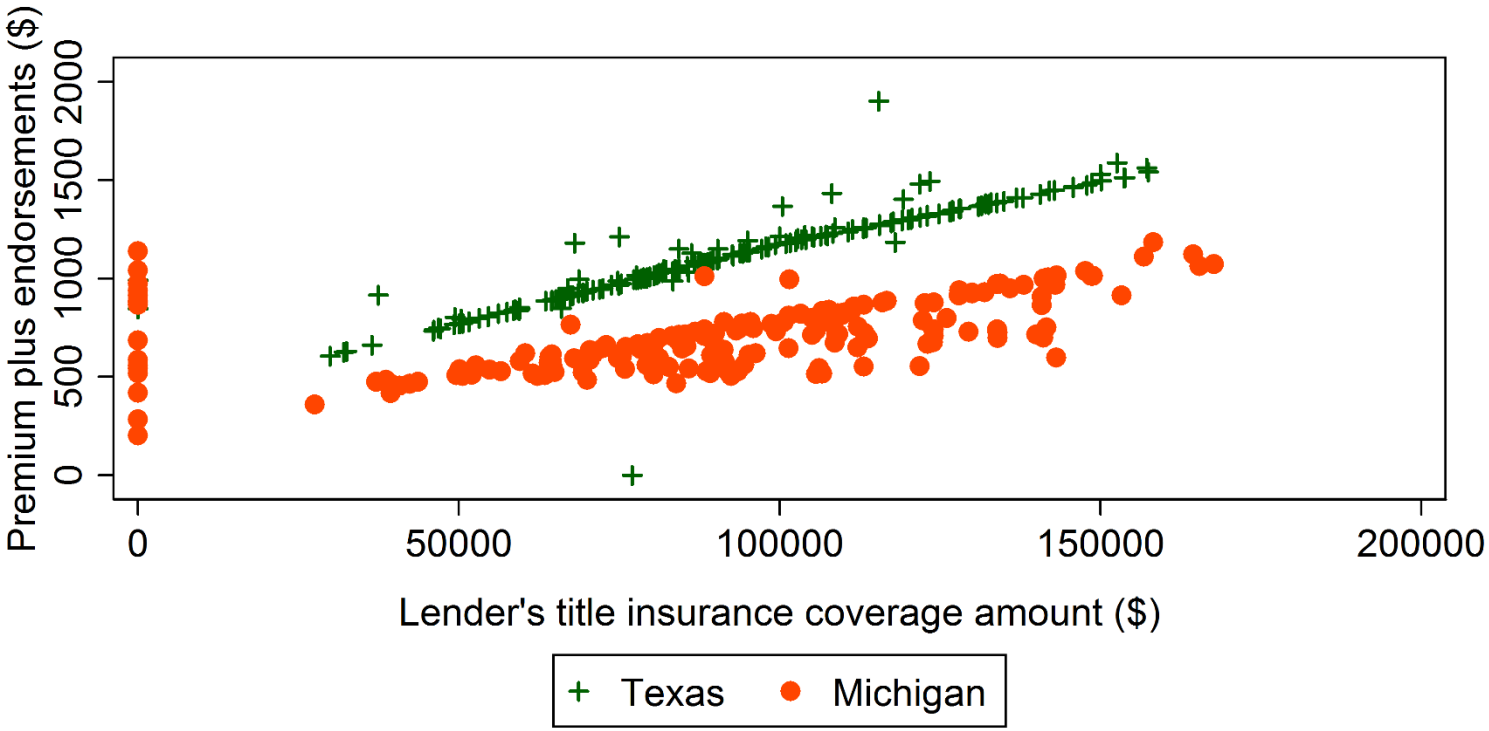
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.22 Comparison of Premium Plus Endorsement Between TX and MA



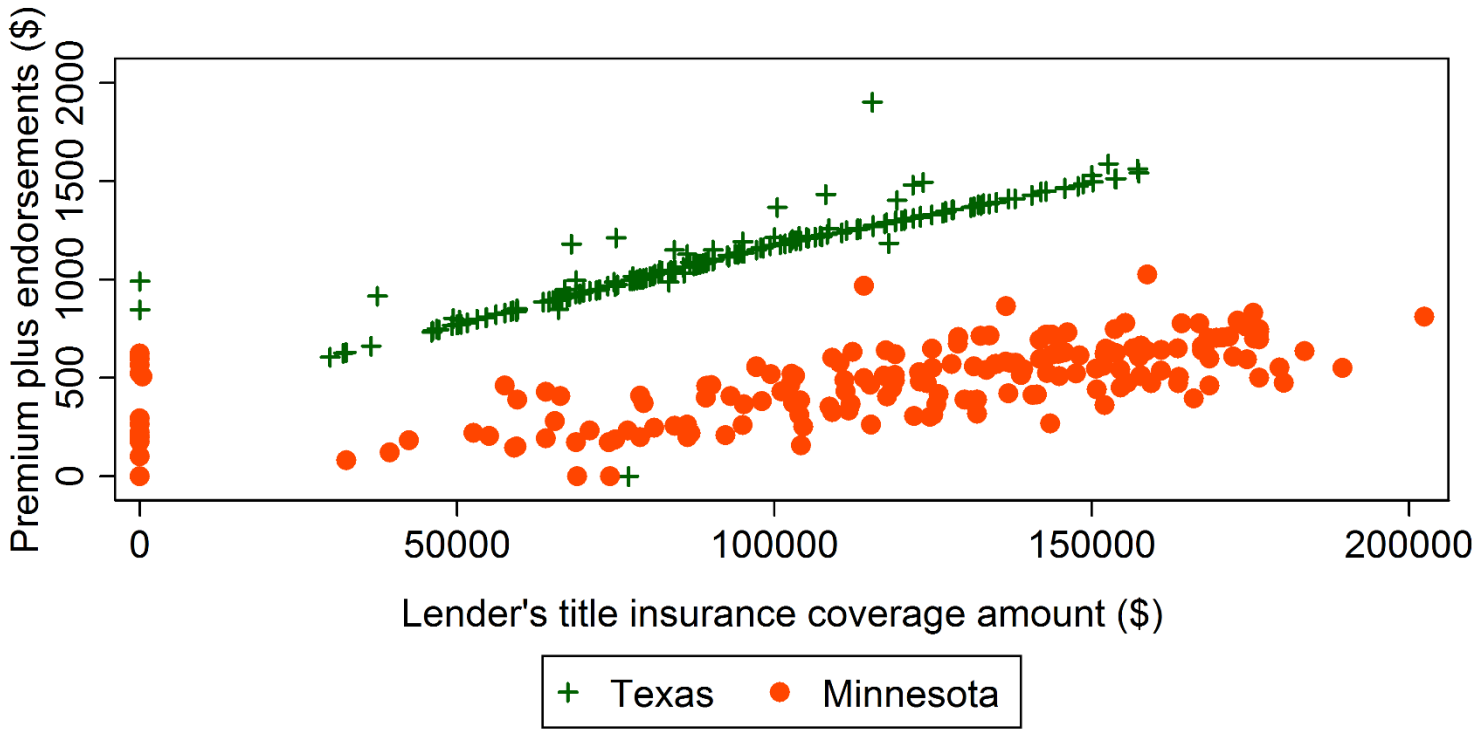
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.23 Comparison of Premium Plus Endorsement Between TX and MI



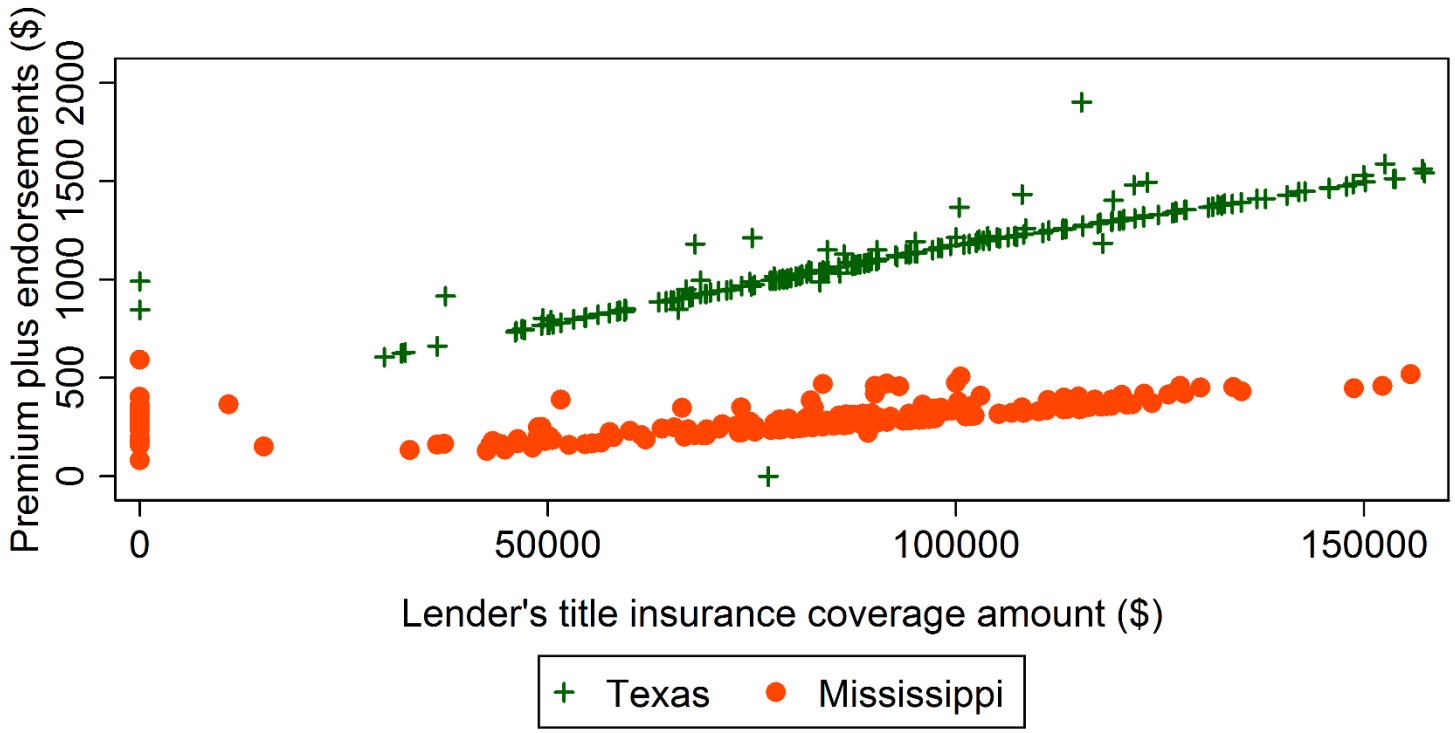
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.24 Comparison of Premium Plus Endorsement Between TX and MN



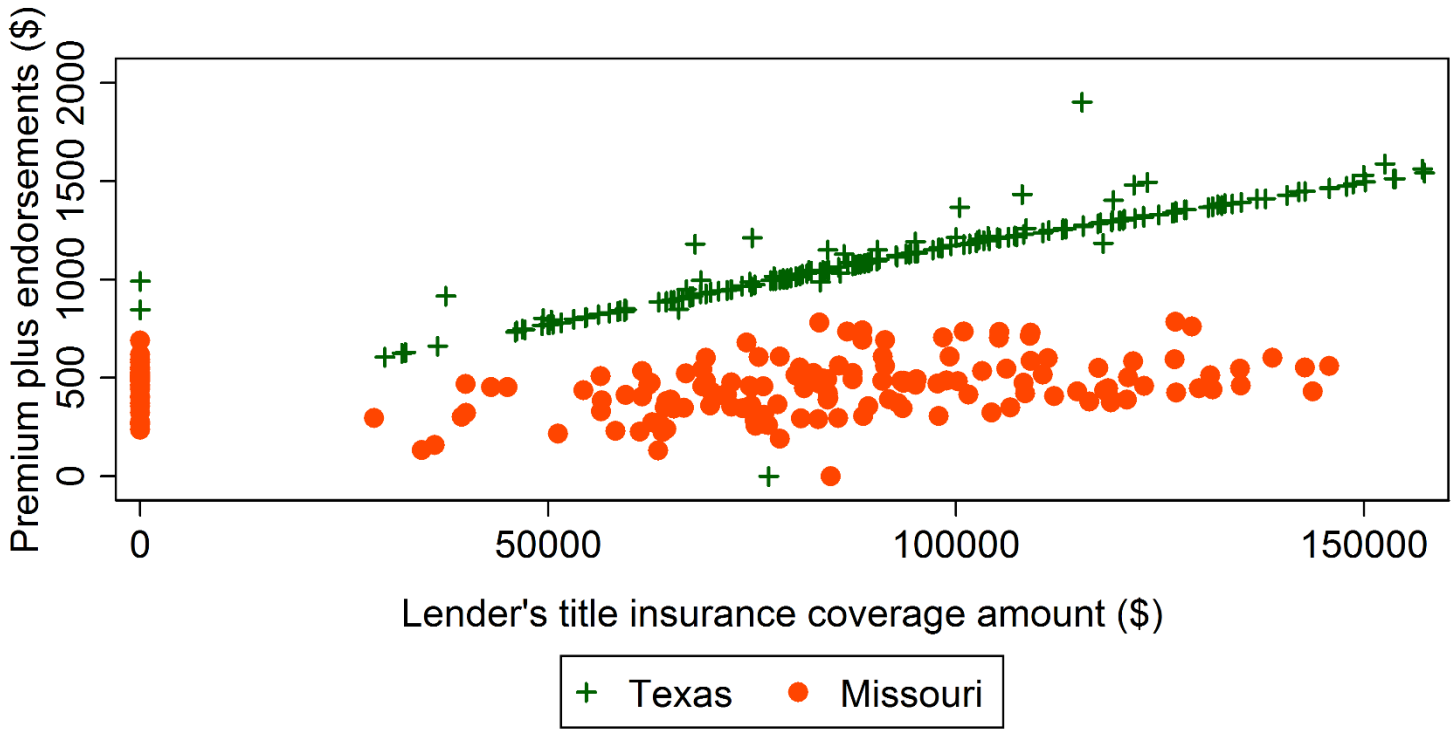
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.25 Comparison of Premium Plus Endorsement Between TX and MS



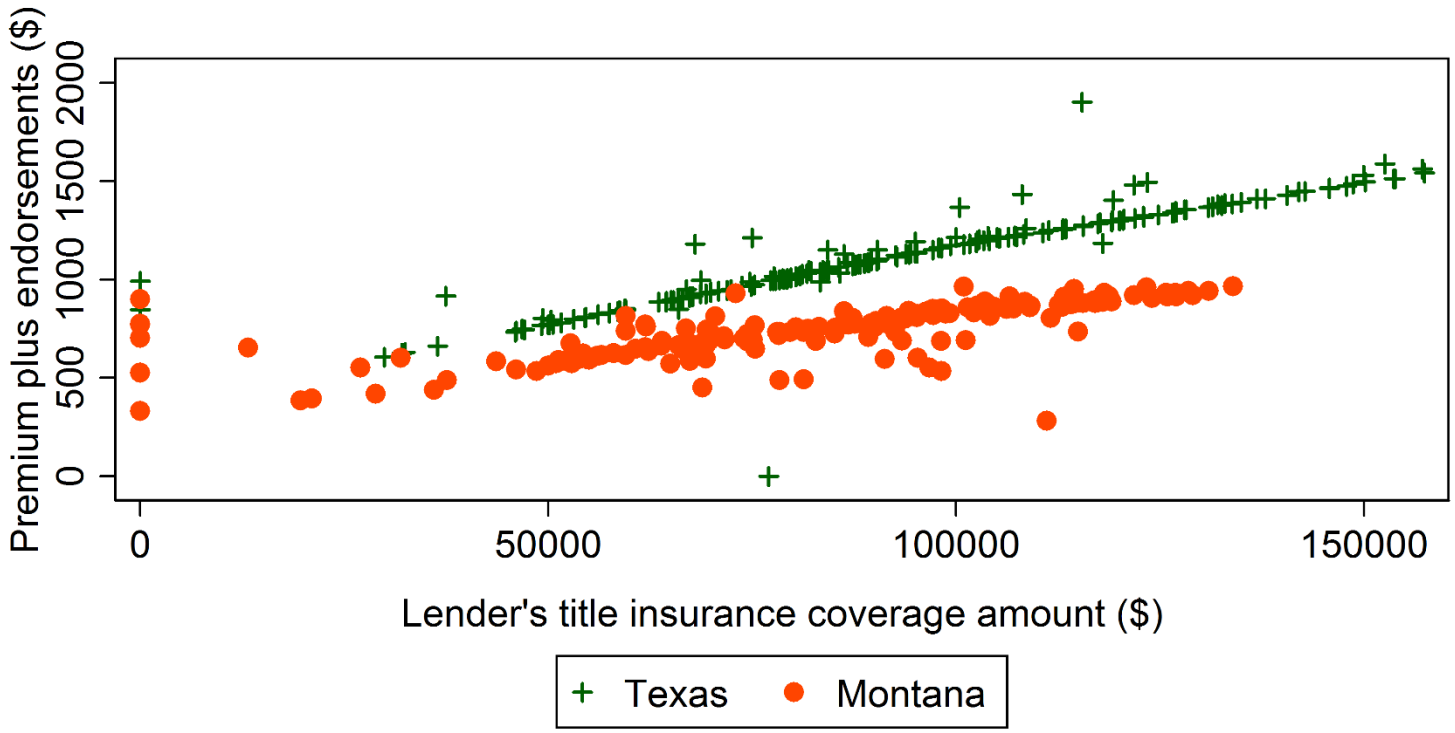
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.26 Comparison of Premium Plus Endorsement Between TX and MO



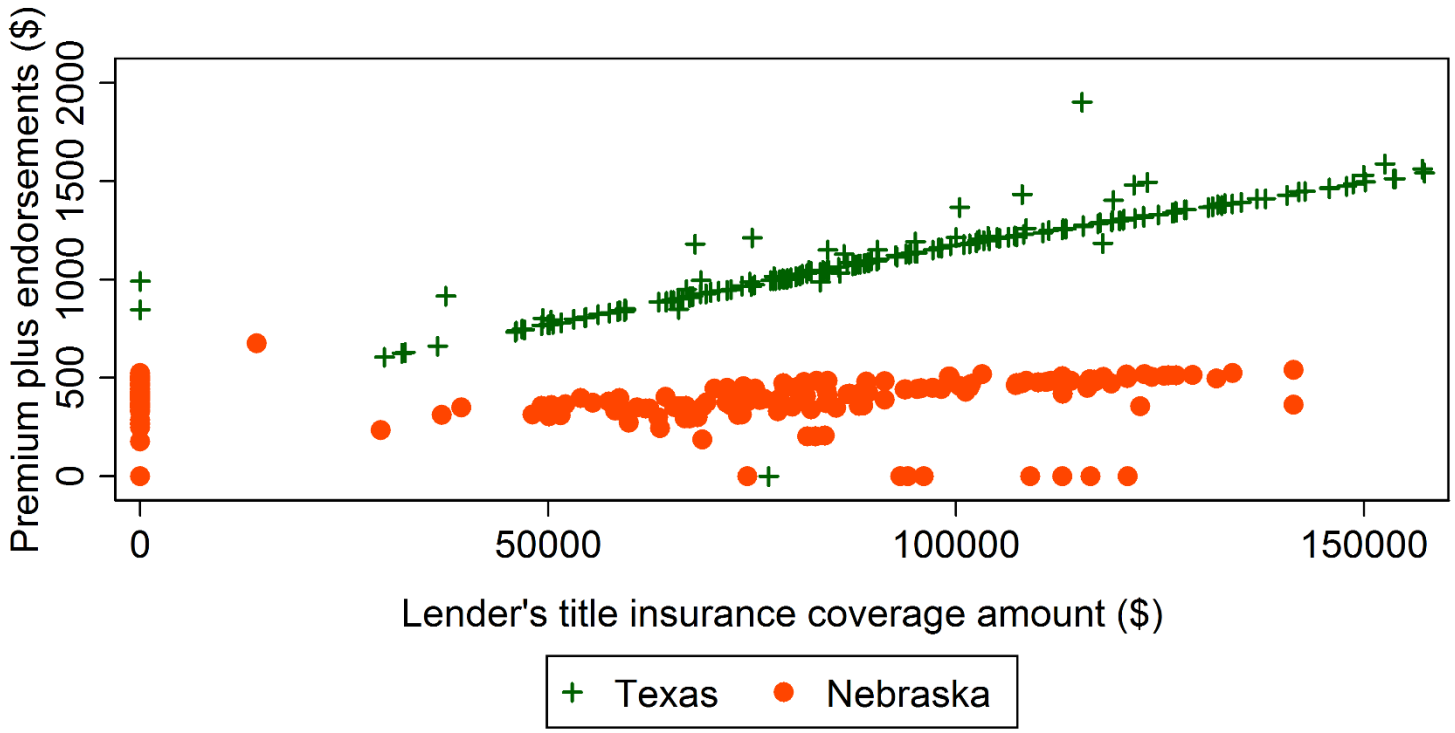
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.27 Comparison of Premium Plus Endorsement Between TX and MT



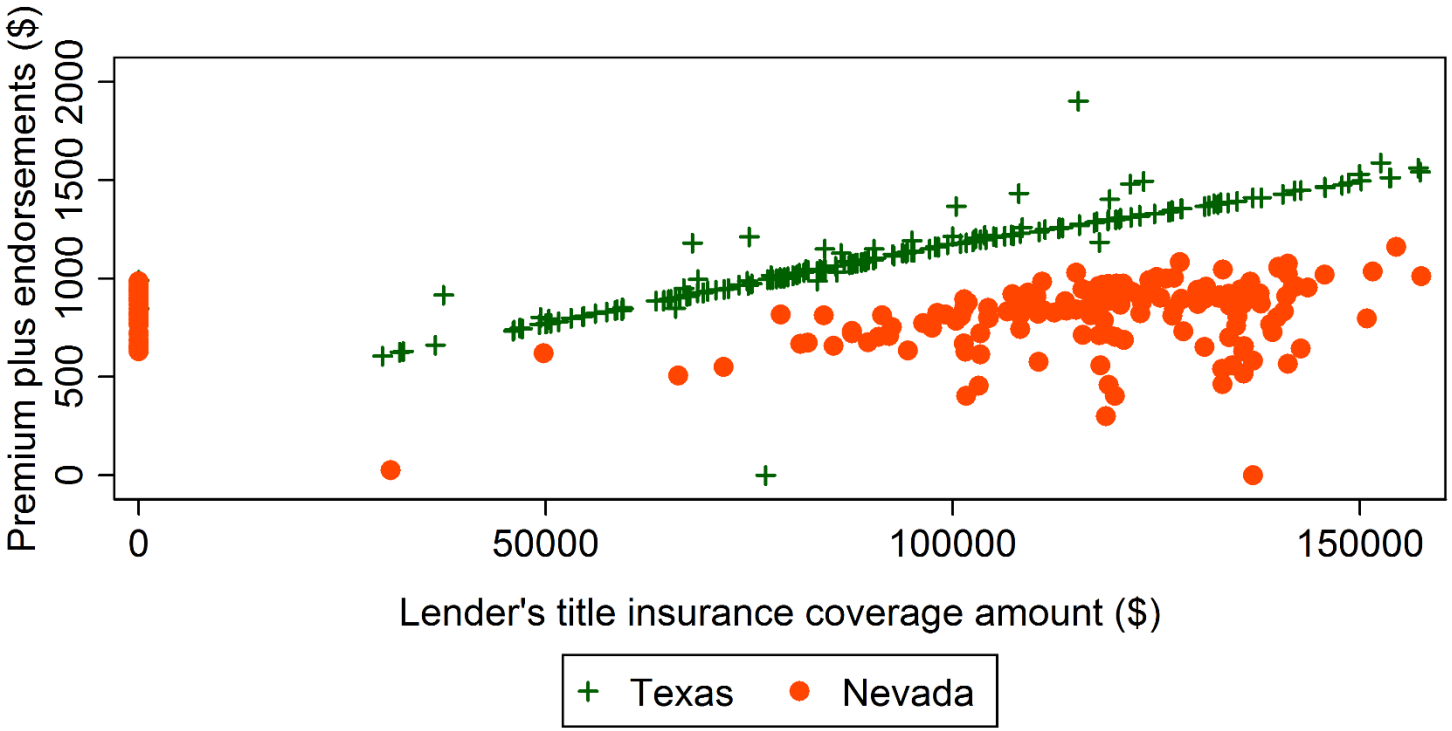
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.28 Comparison of Premium Plus Endorsement Between TX and NE



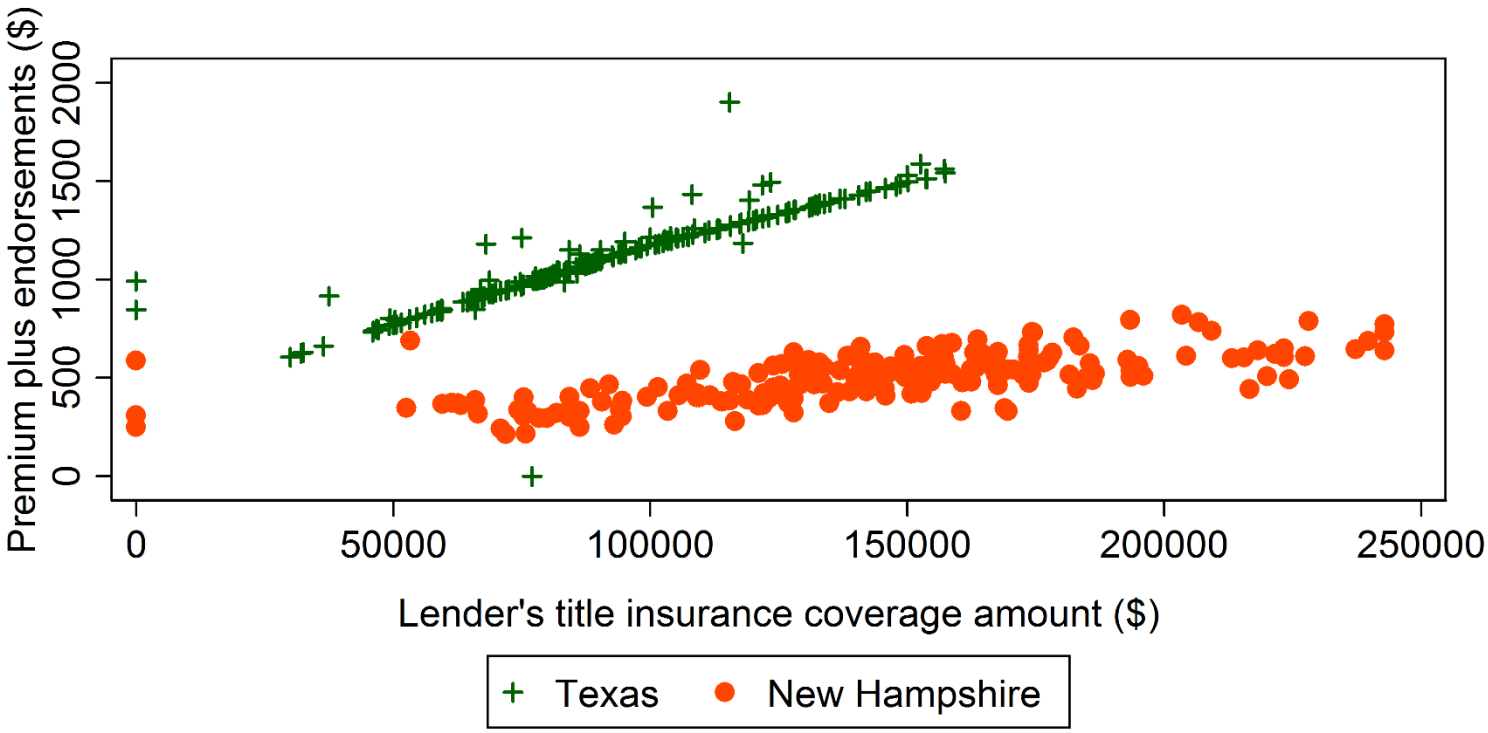
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.29 Comparison of Premium Plus Endorsement Between TX and NV



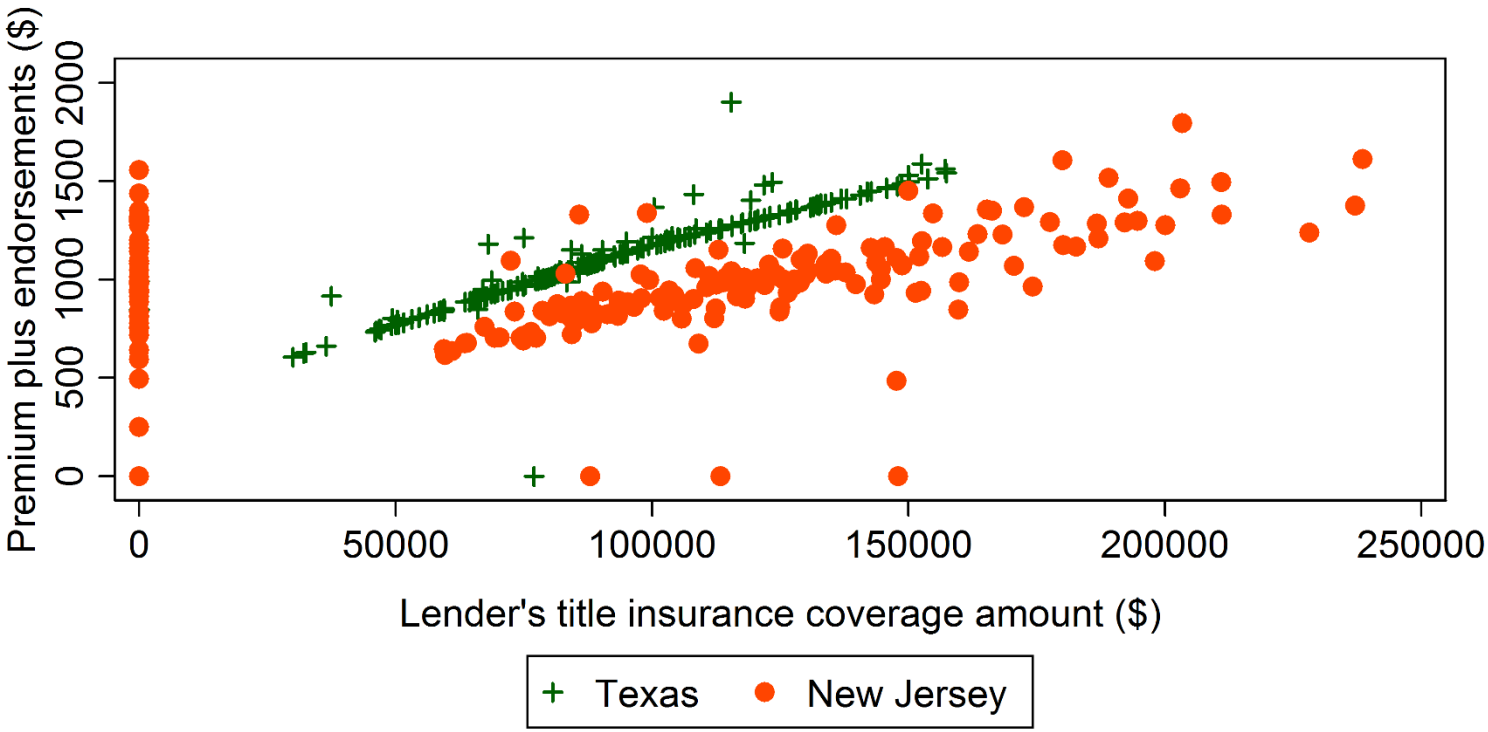
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.30 Comparison of Premium Plus Endorsement Between TX and NH



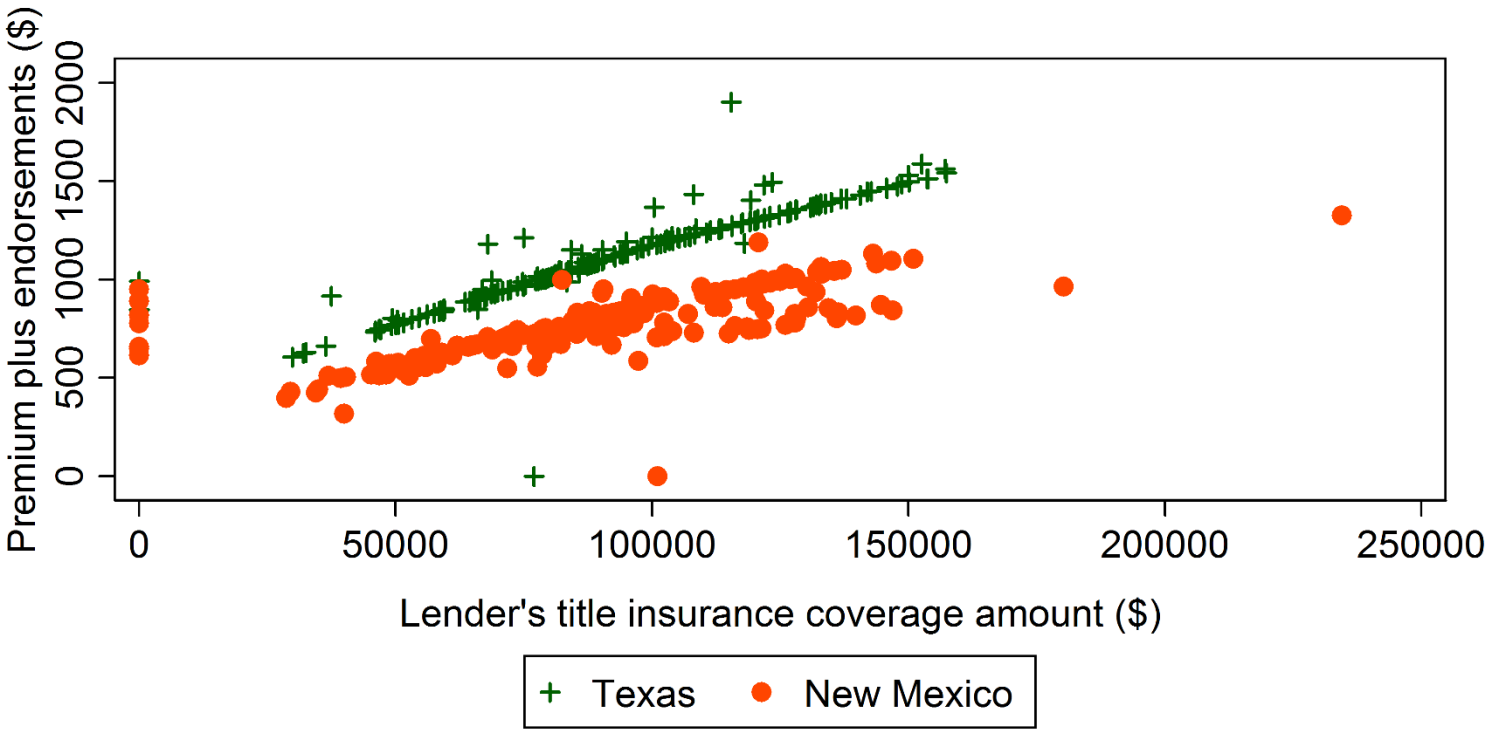
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.31 Comparison of Premium Plus Endorsement Between TX and NJ



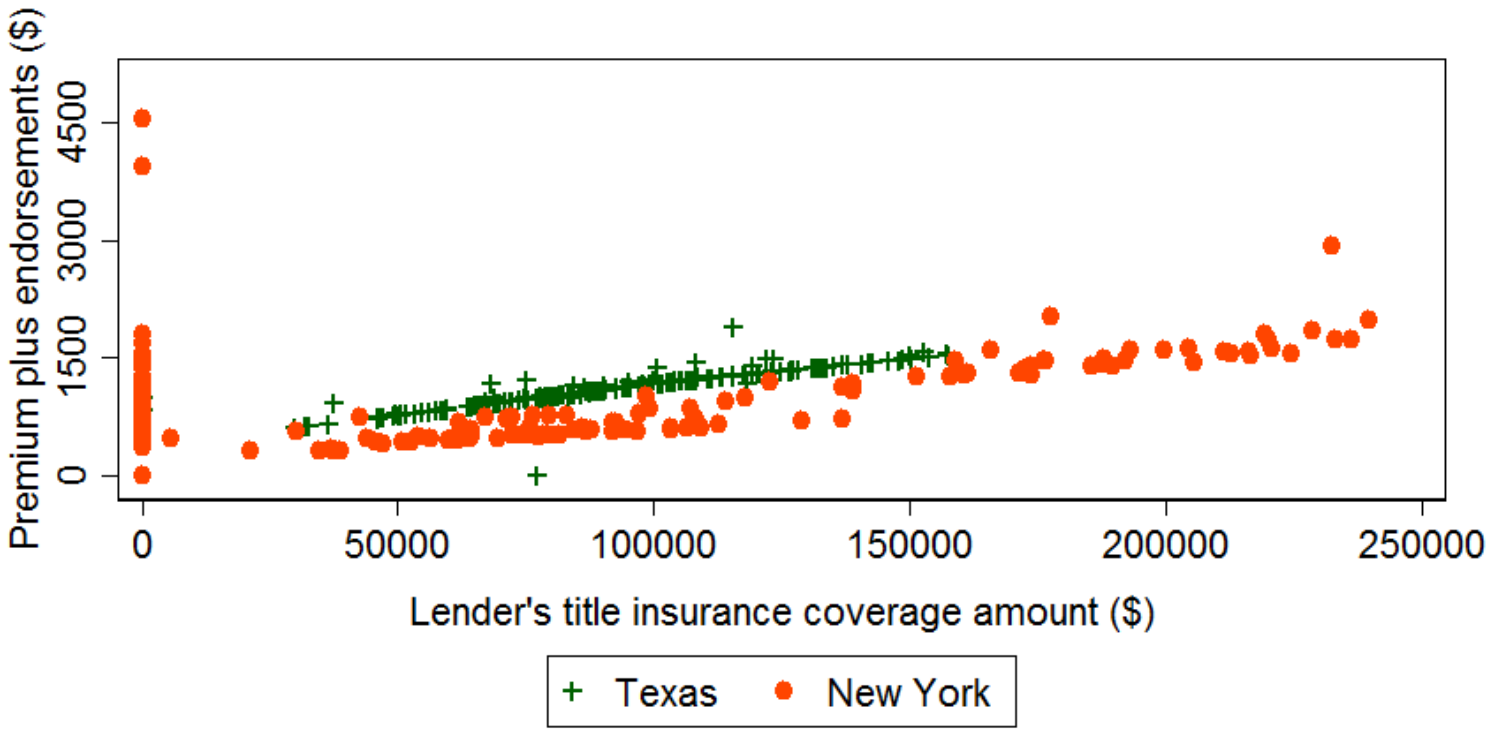
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.32 Comparison of Premium Plus Endorsement Between TX and NM



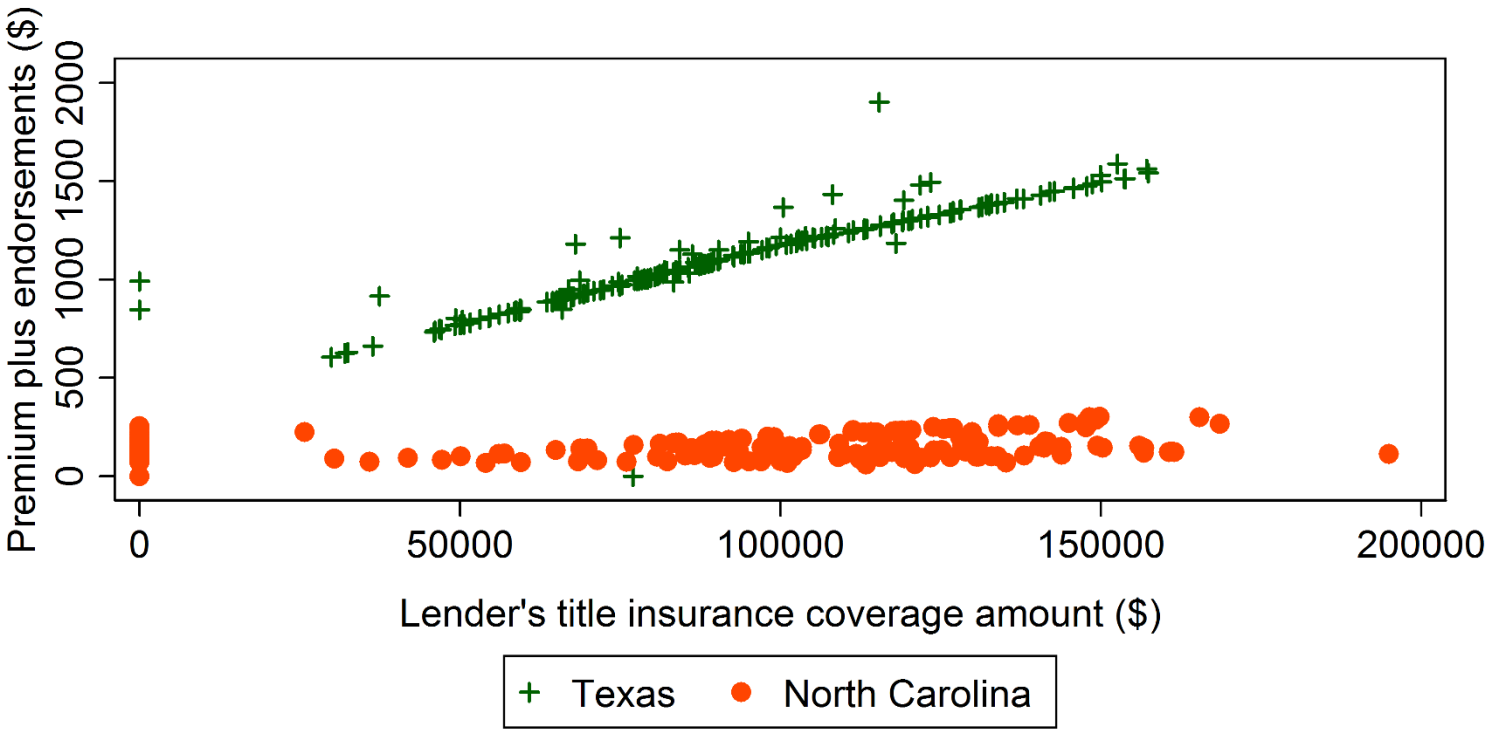
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.33 Comparison of Premium Plus Endorsement Between TX and NY



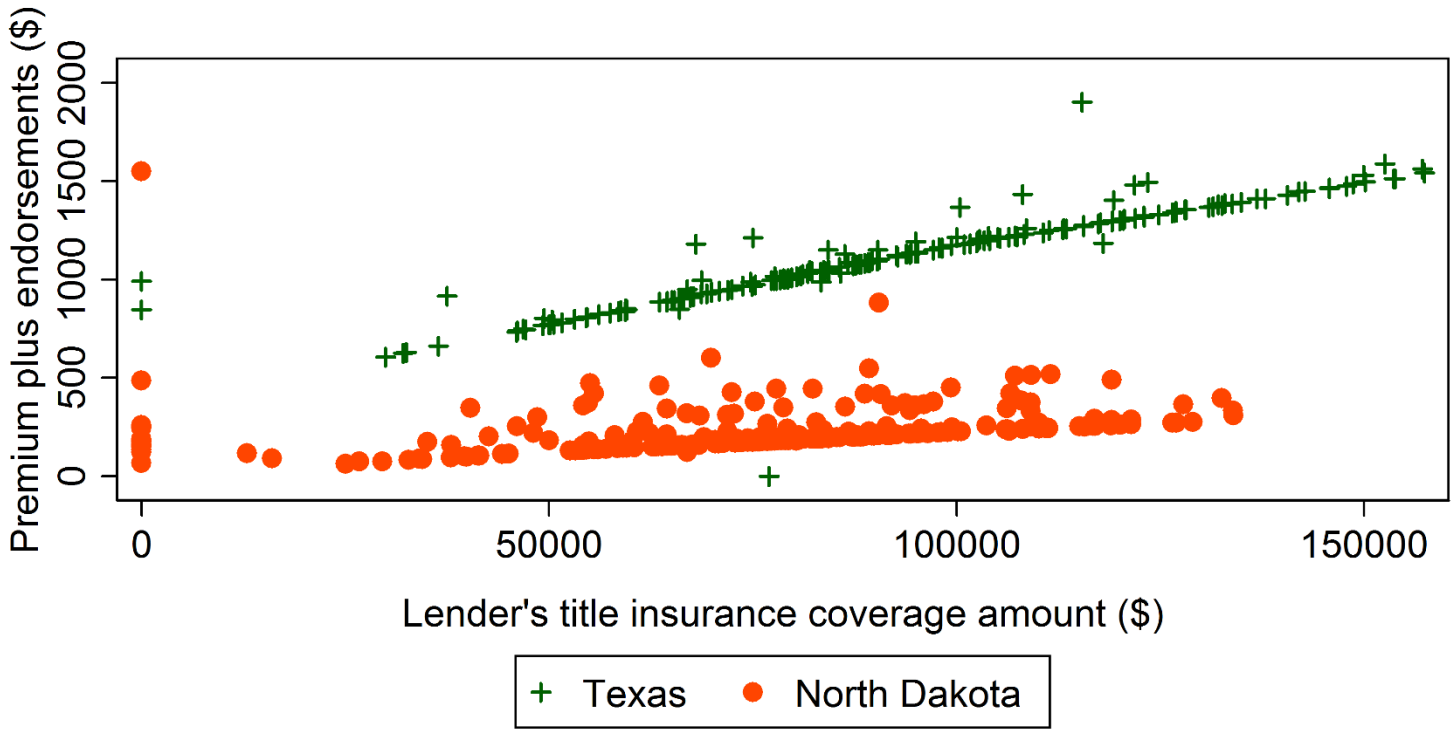
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.34 Comparison of Premium Plus Endorsement Between TX and NC



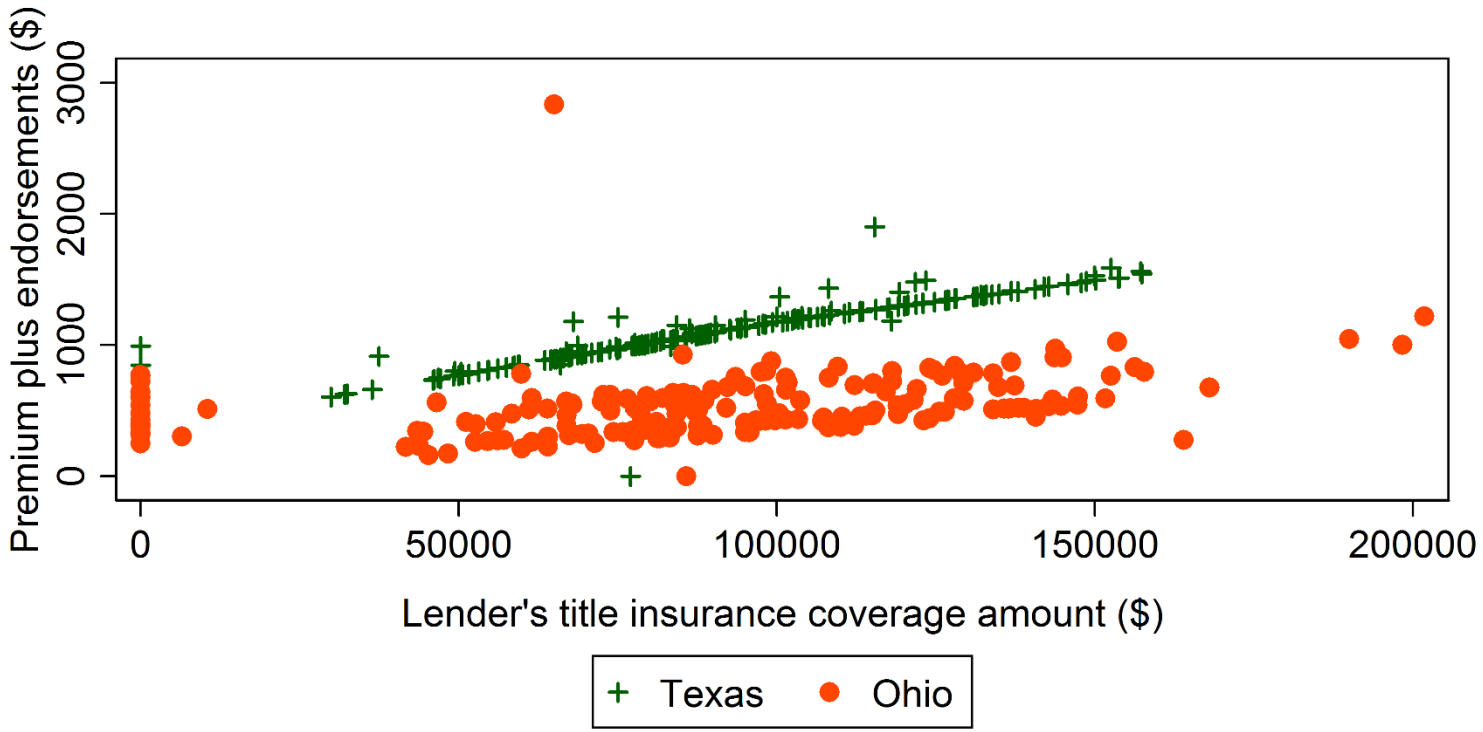
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.35 Comparison of Premium Plus Endorsement Between TX and ND



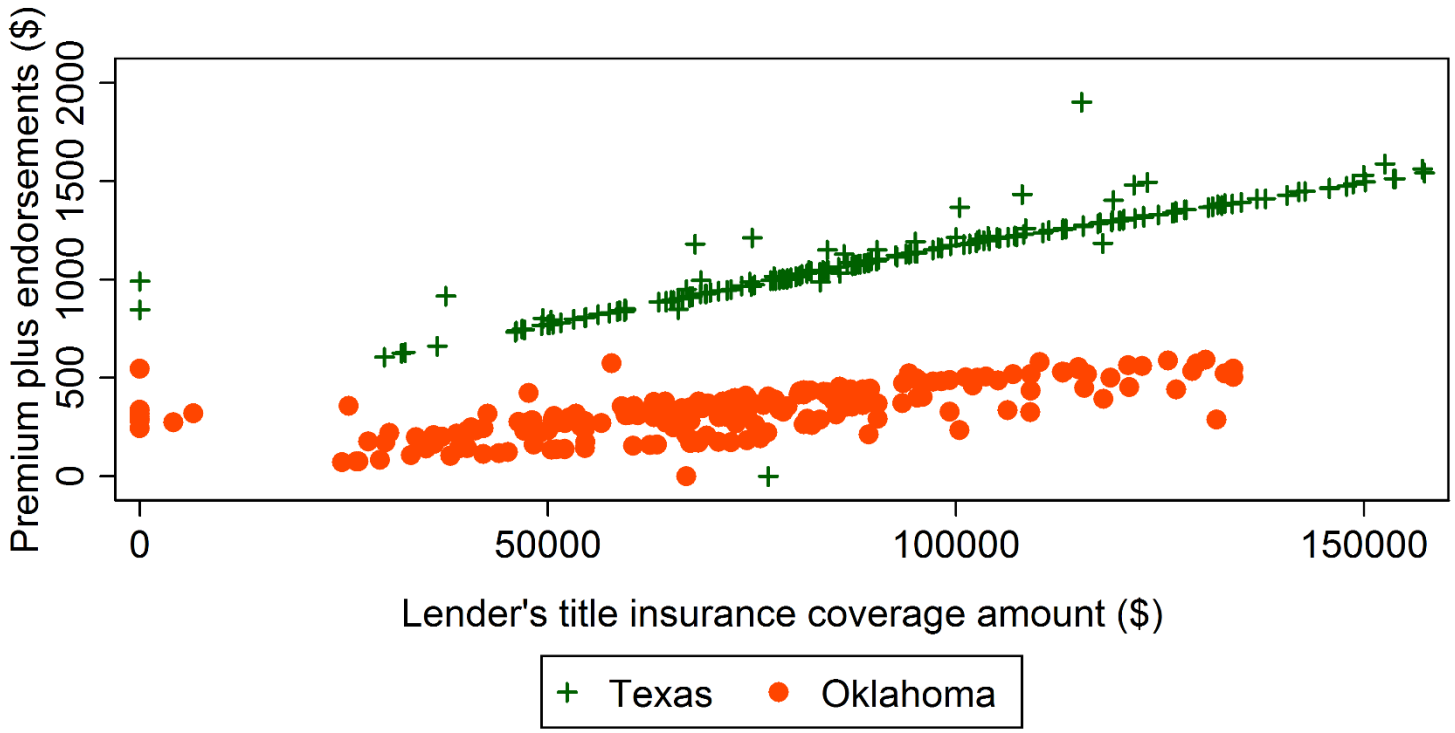
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.36 Comparison of Premium Plus Endorsement Between TX and OH



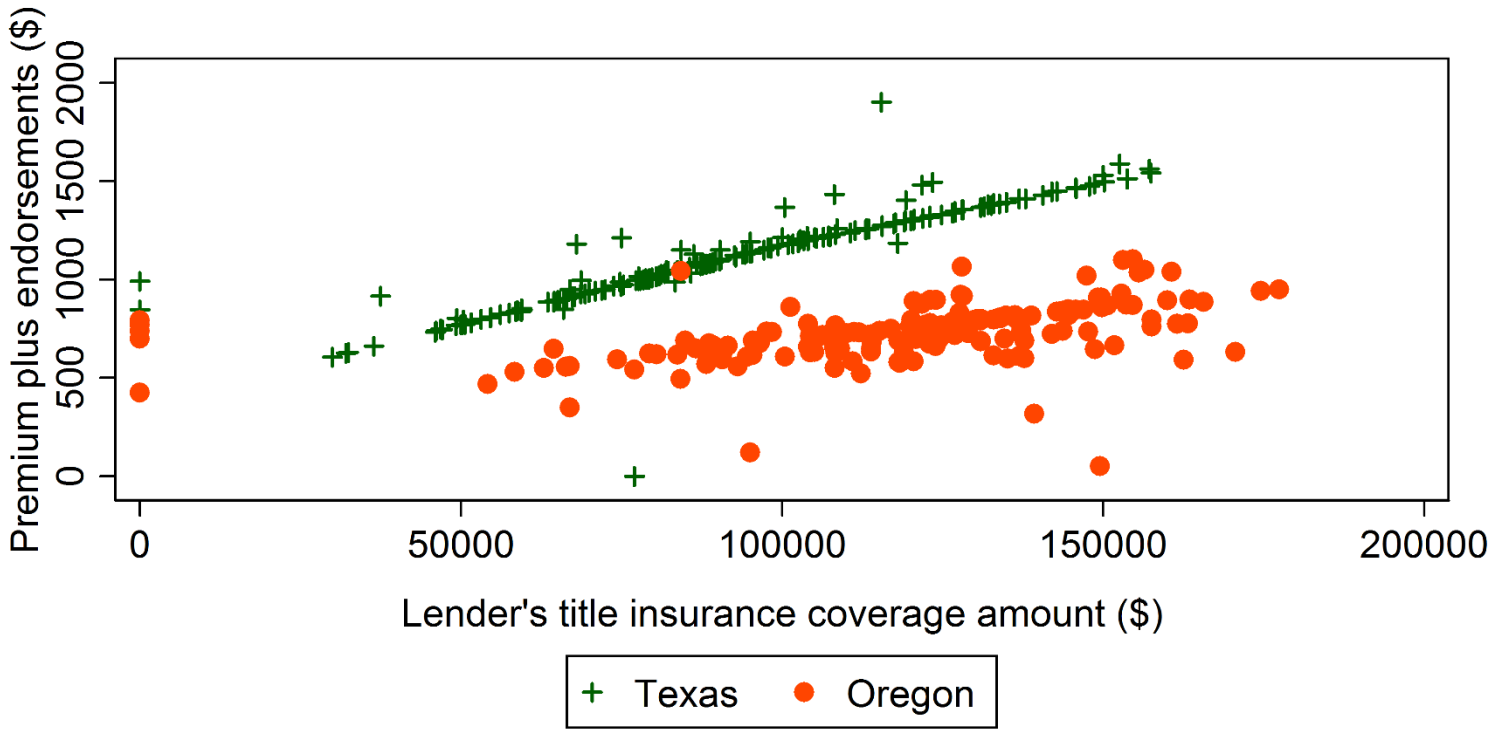
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.37 Comparison of Premium Plus Endorsement Between TX and OK



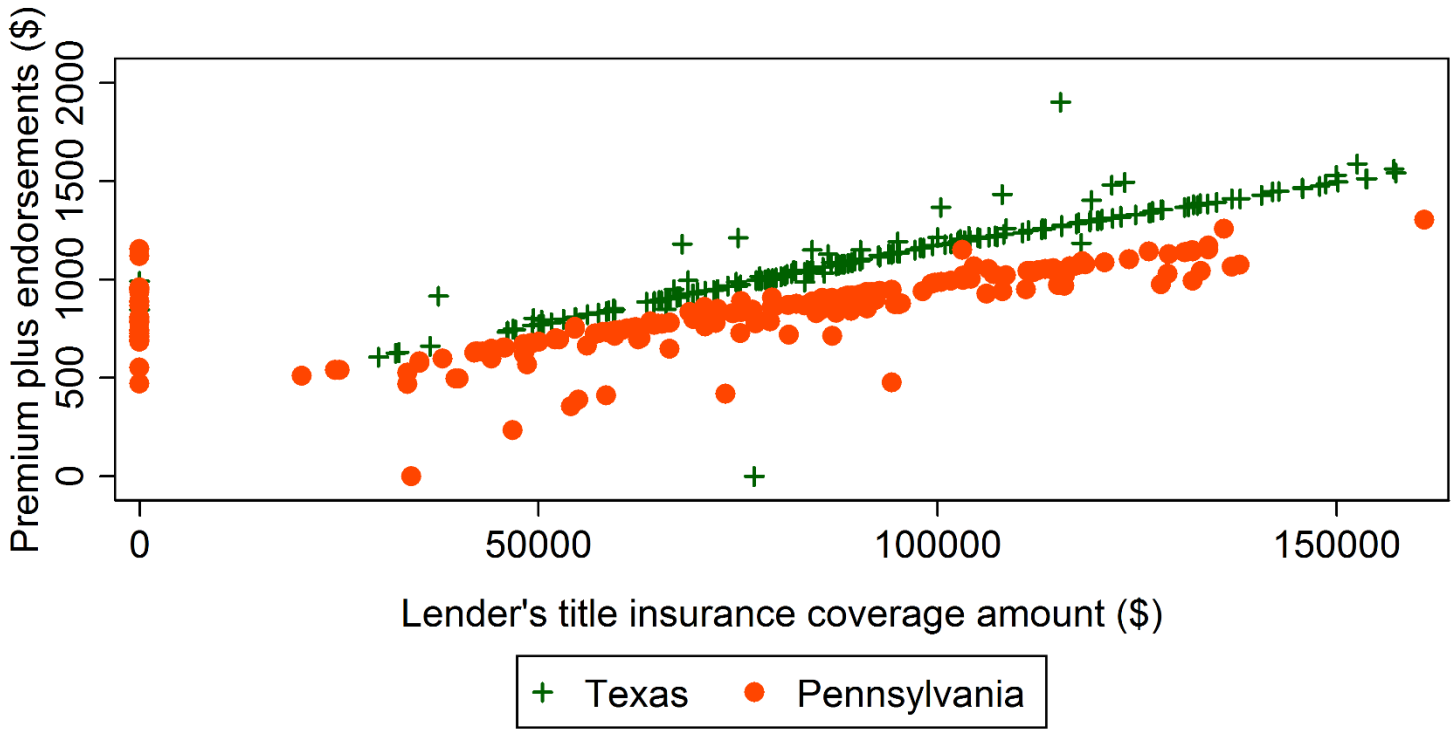
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.38 Comparison of Premium Plus Endorsement Between TX and OR



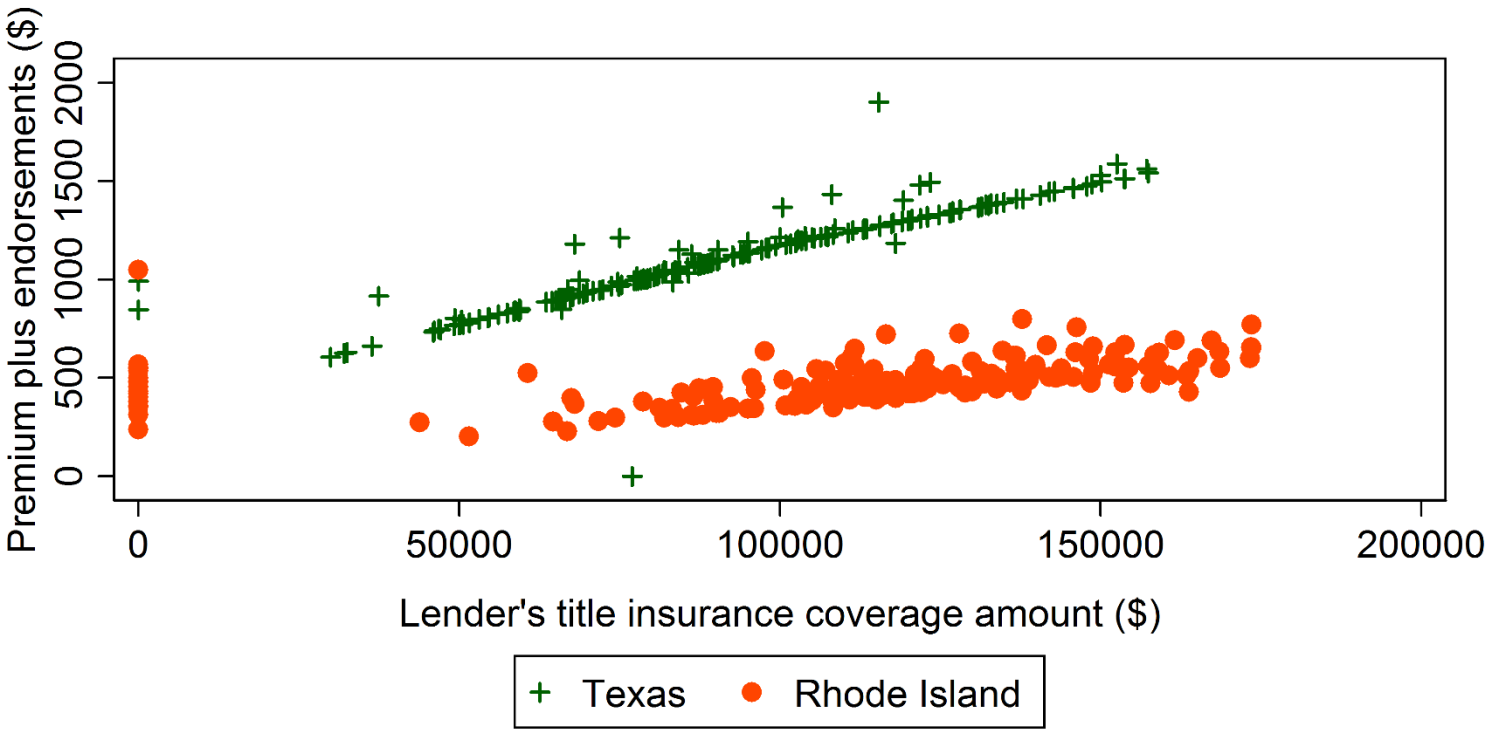
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.39 Comparison of Premium Plus Endorsement Between TX and PA



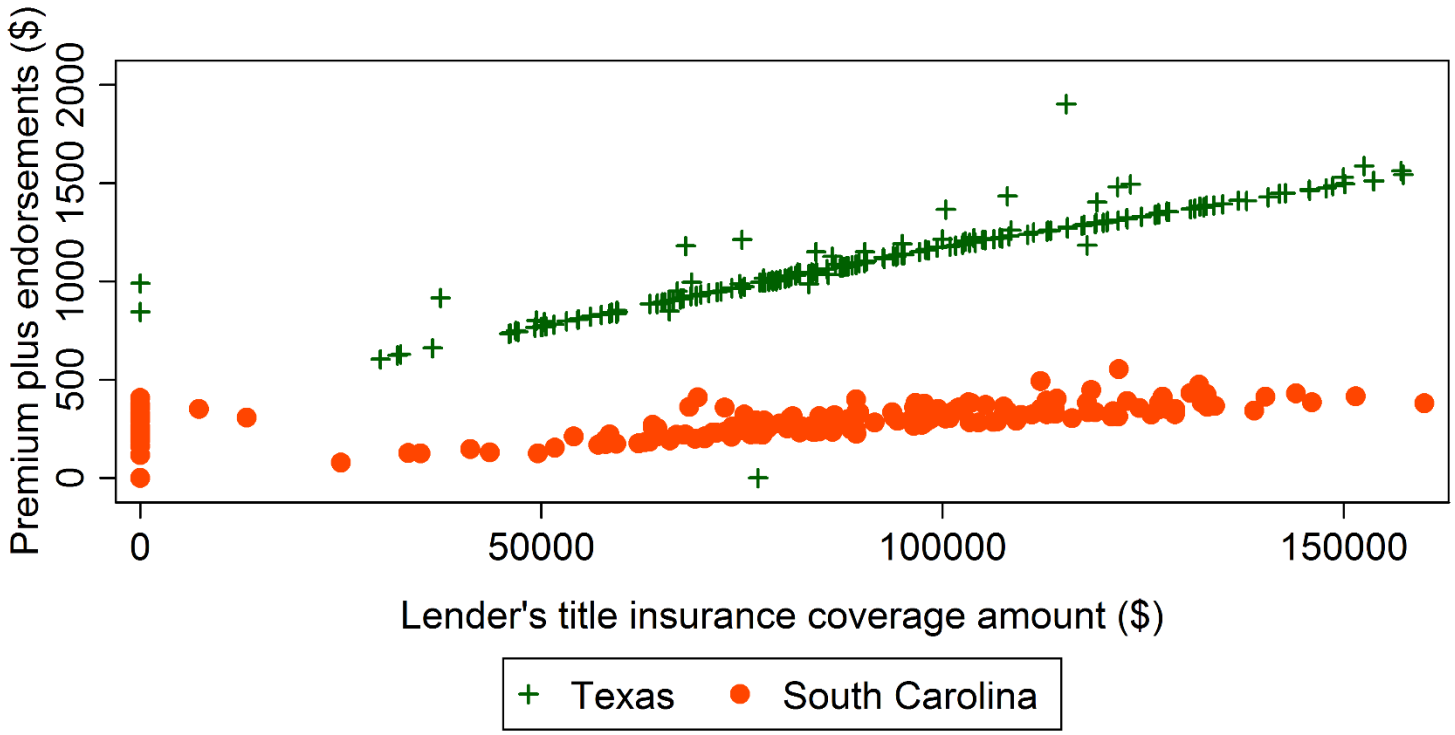
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.40 Comparison of Premium Plus Endorsement Between TX and RI



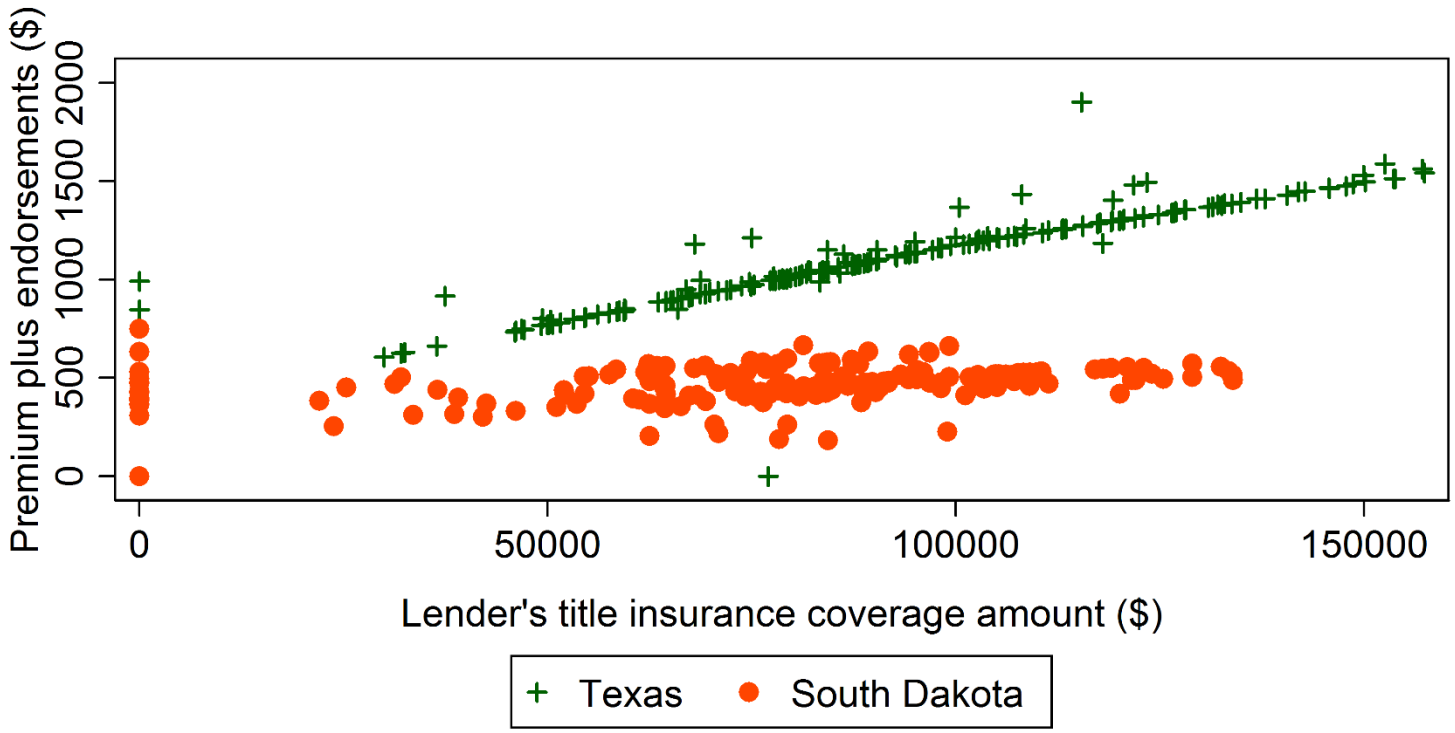
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.41 Comparison of Premium Plus Endorsement Between TX and SC



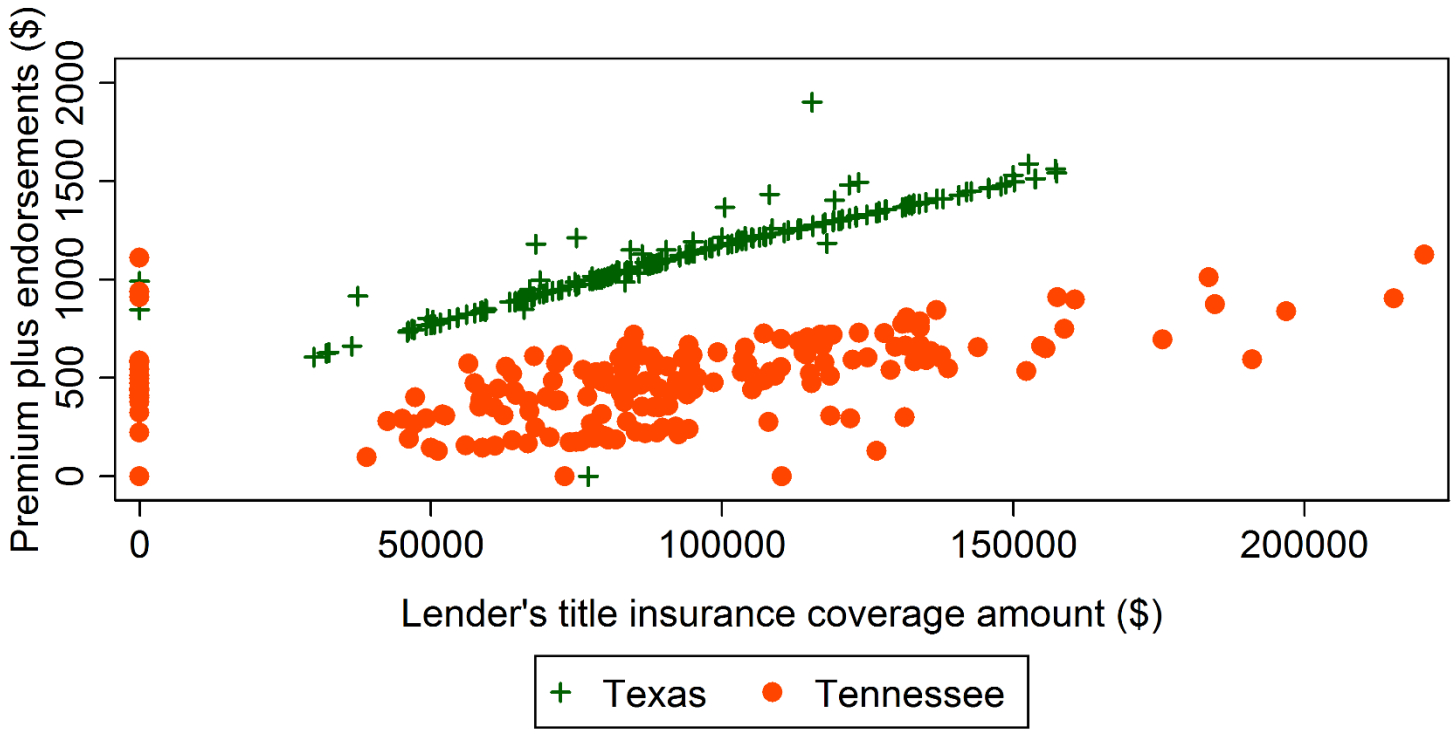
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.42 Comparison of Premium Plus Endorsement Between TX and SD



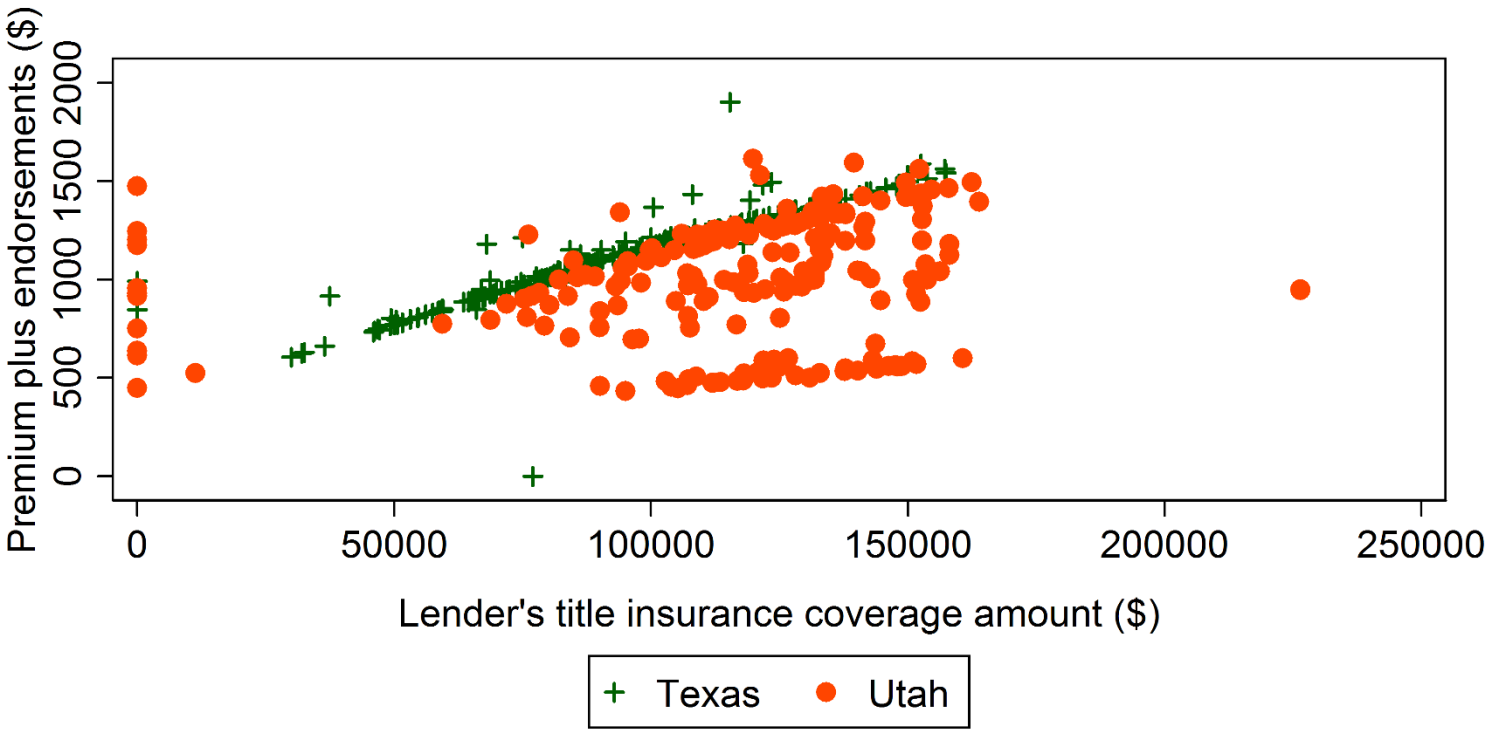
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.43 Comparison of Premium Plus Endorsement Between TX and TN



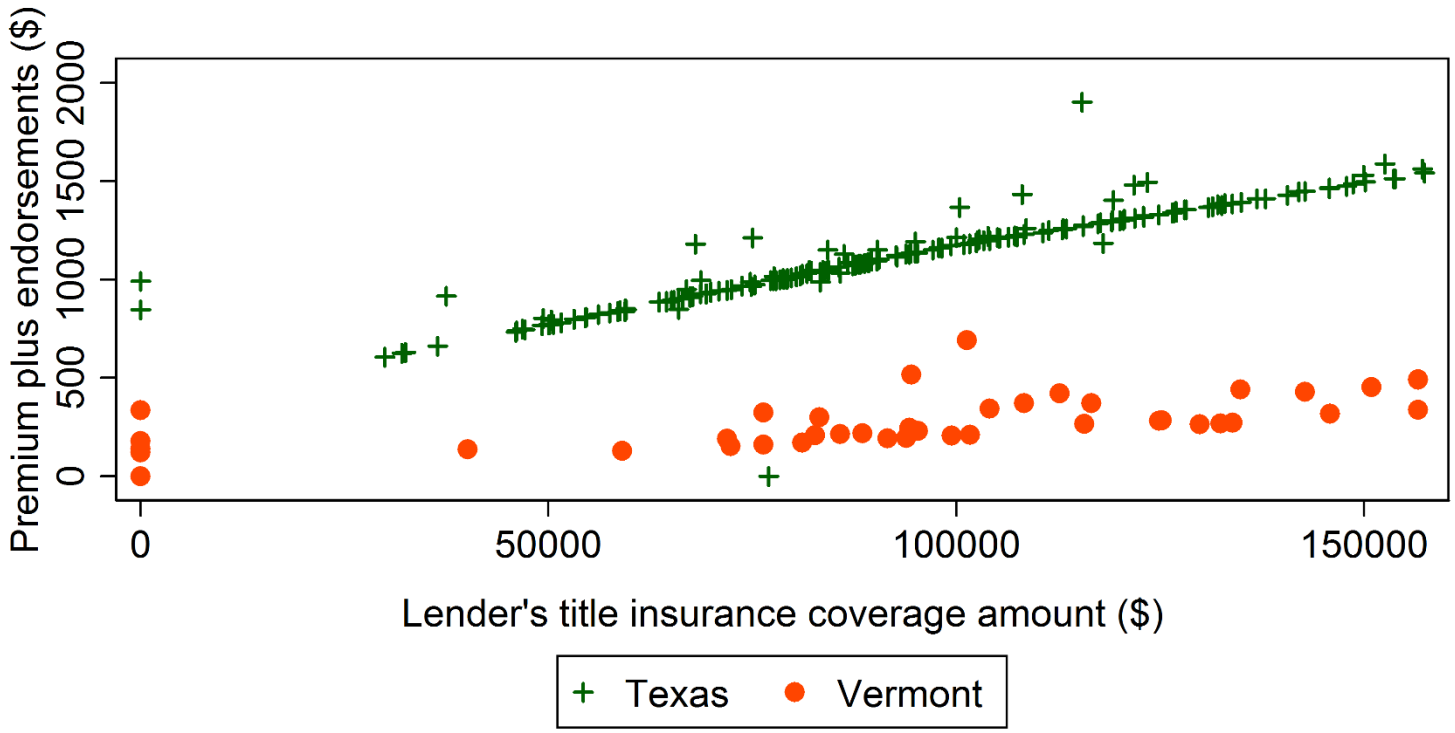
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.44 Comparison of Premium Plus Endorsement Between TX and UT



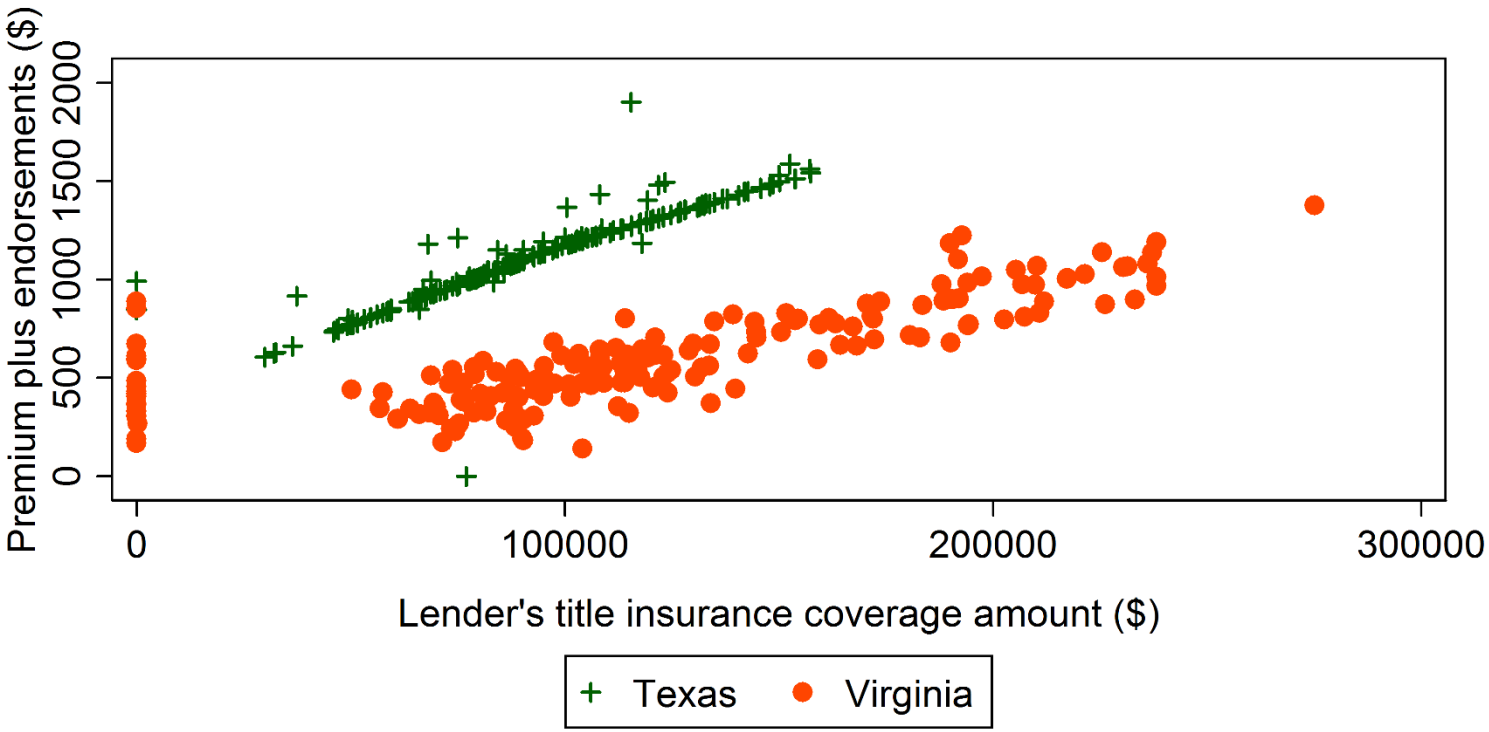
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.45 Comparison of Premium Plus Endorsement Between TX and VT



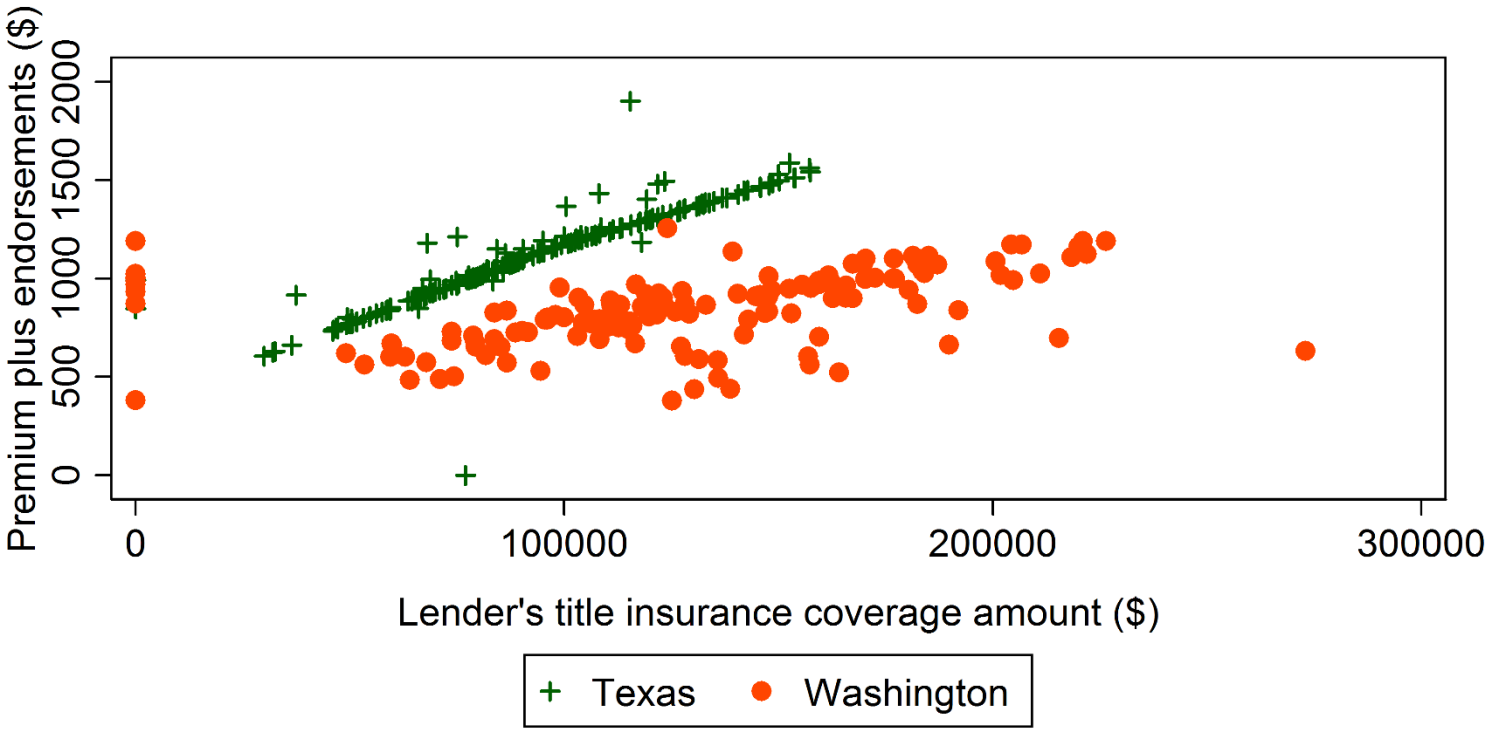
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.46 Comparison of Premium Plus Endorsement Between TX and VA



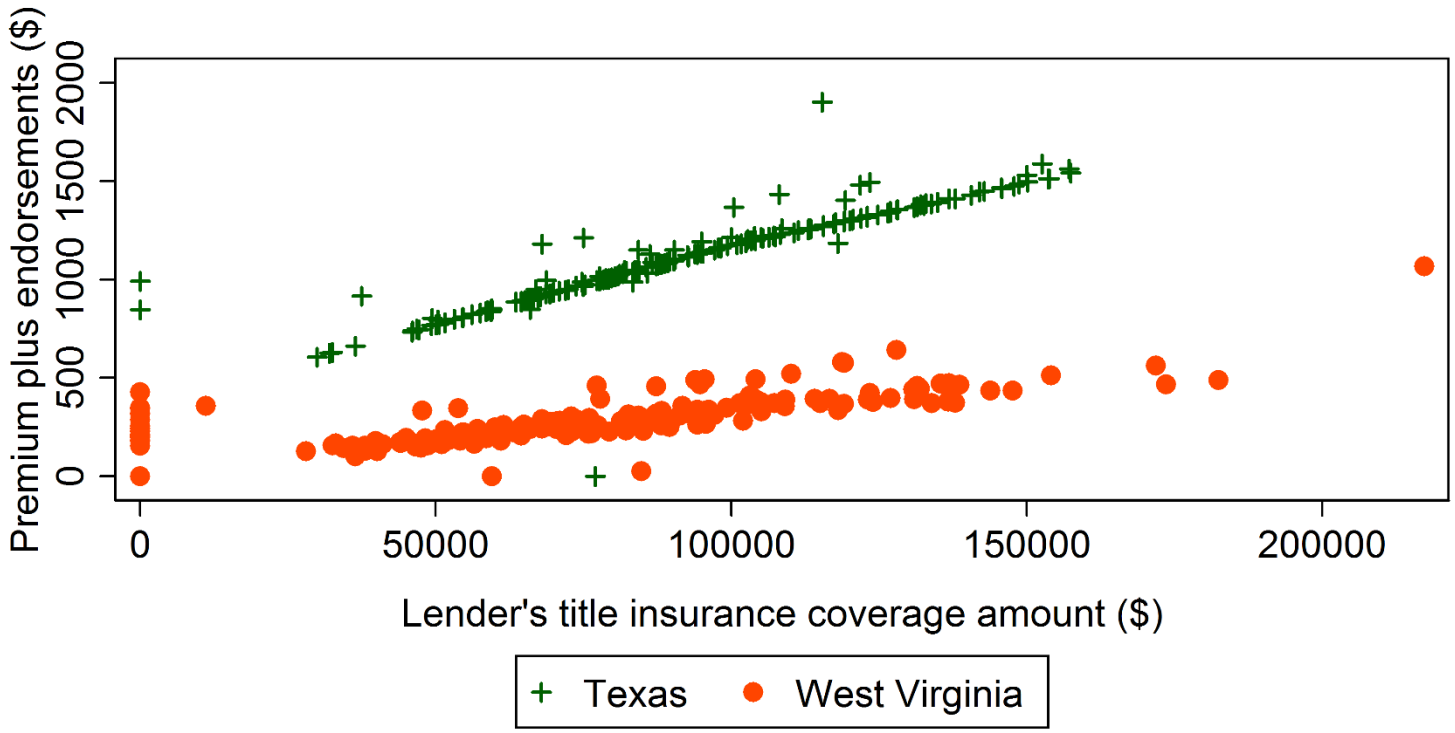
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.47 Comparison of Premium Plus Endorsement Between TX and WA



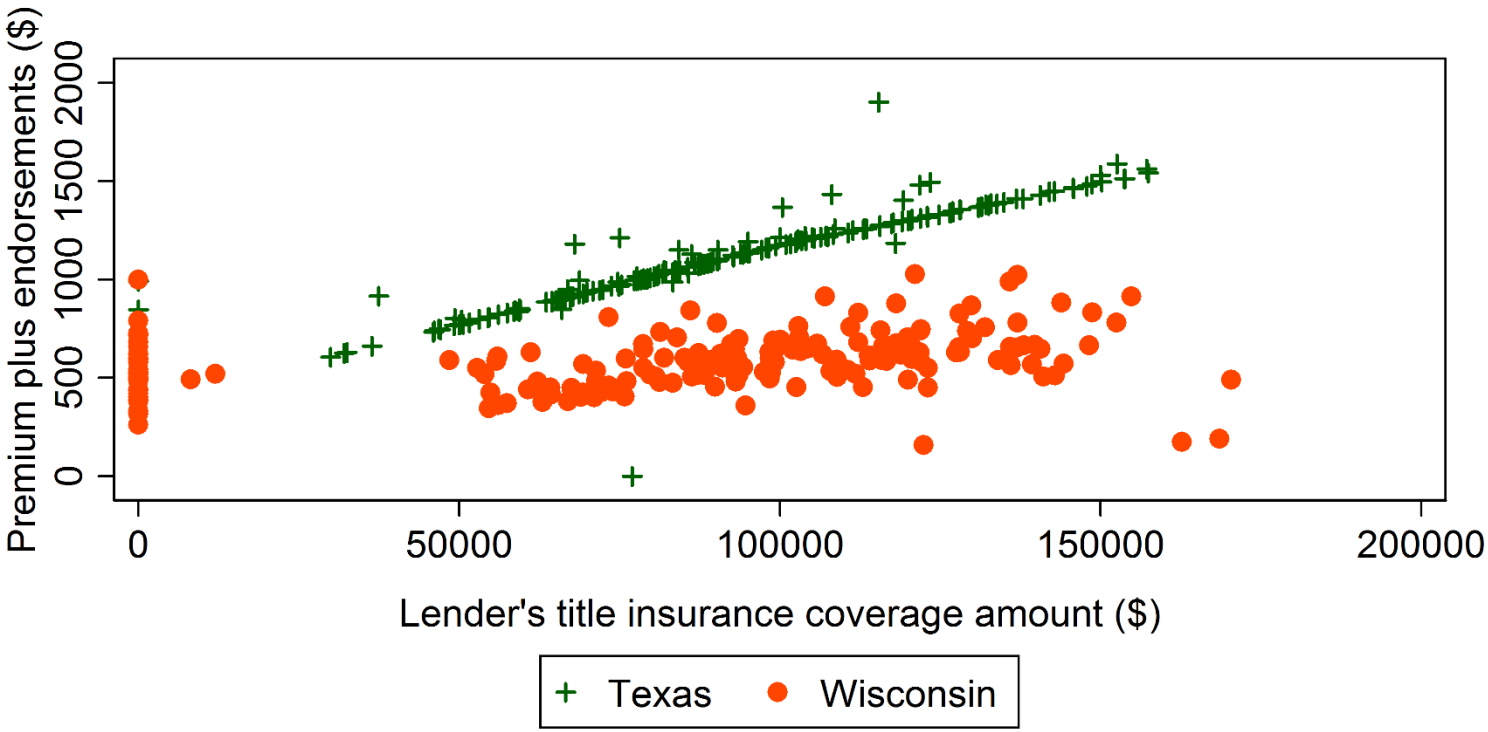
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.48 Comparison of Premium Plus Endorsement Between TX and WV



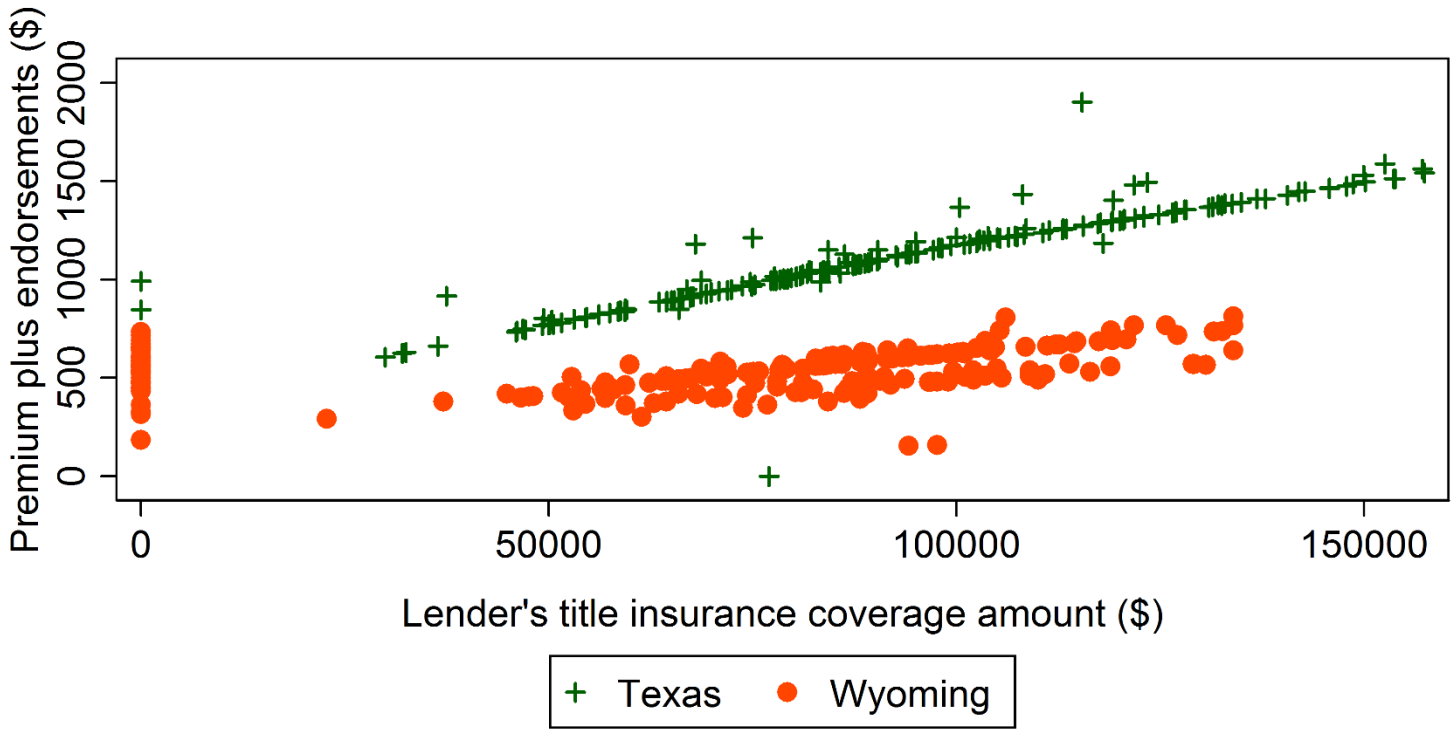
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.49 Comparison of Premium Plus Endorsement Between TX and WI



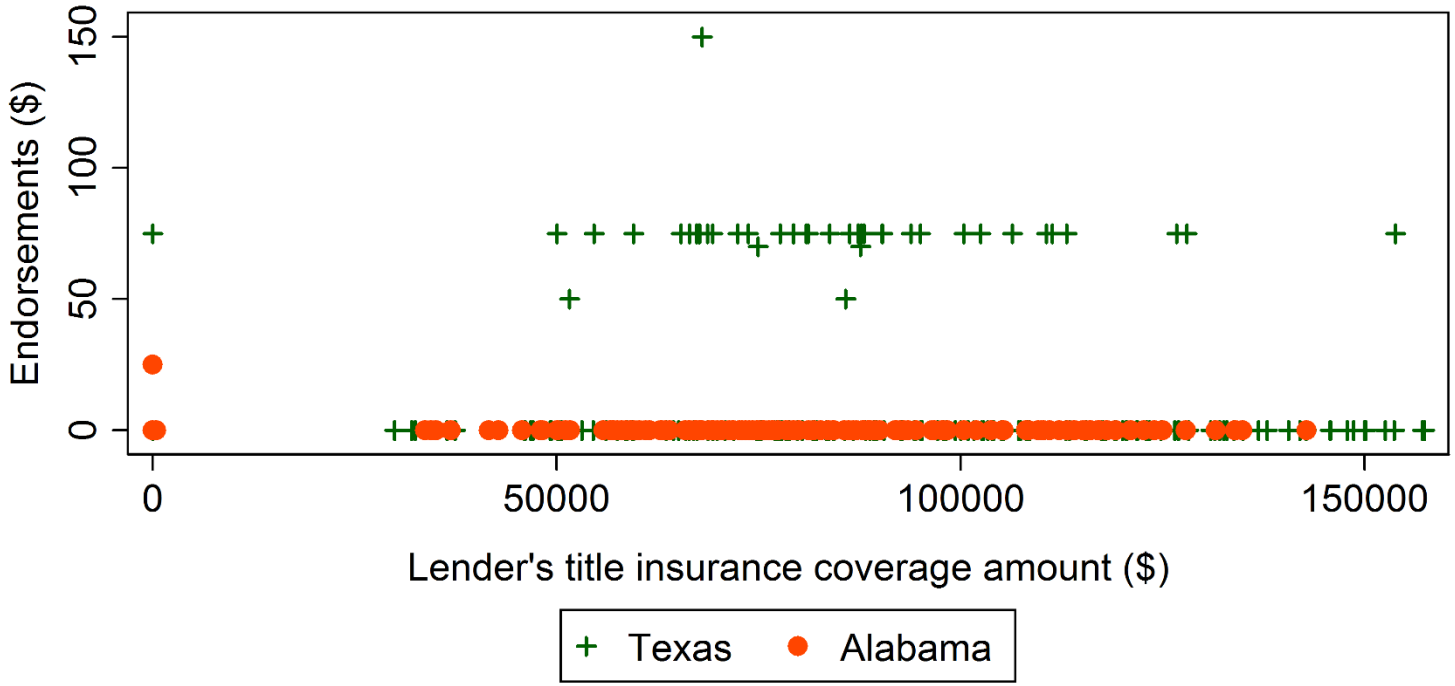
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.6.50 Comparison of Premium Plus Endorsement Between TX and WY



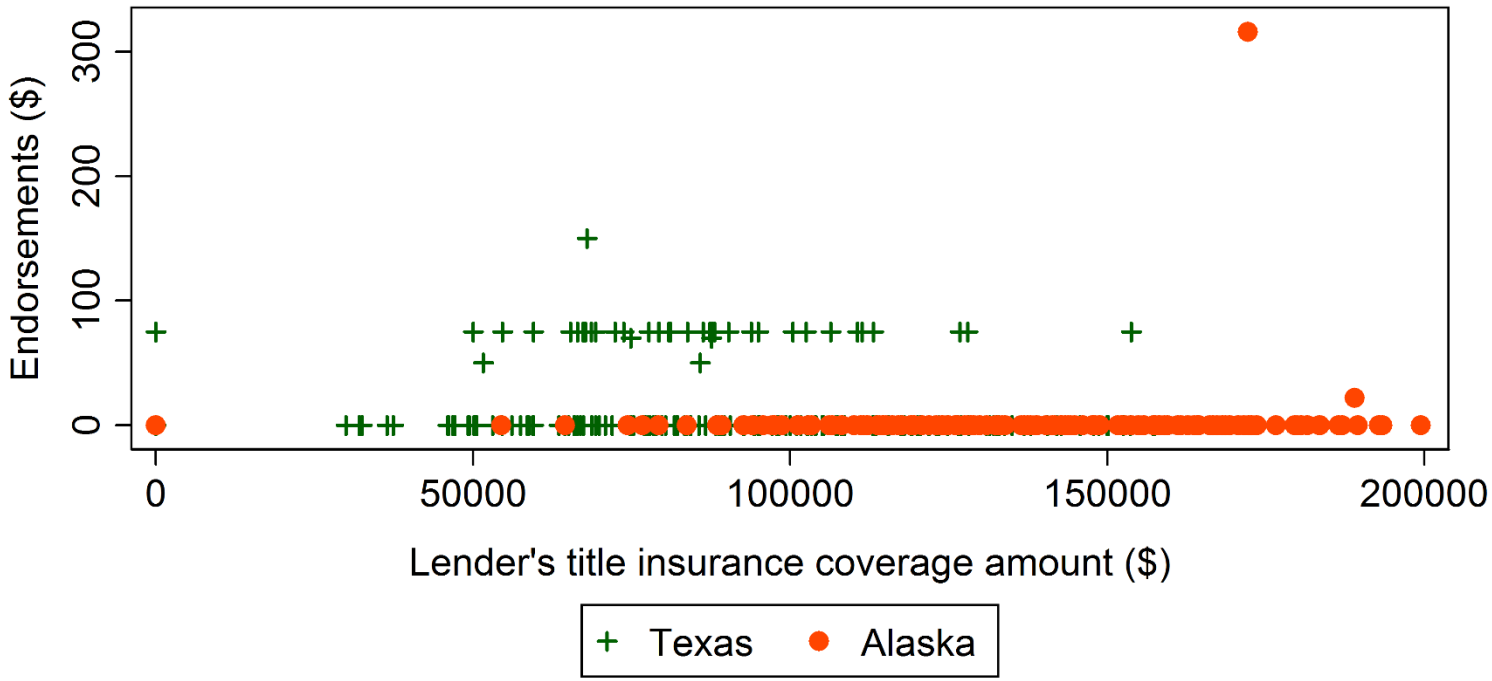
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.1 Comparison of Endorsements Between Texas and Alabama



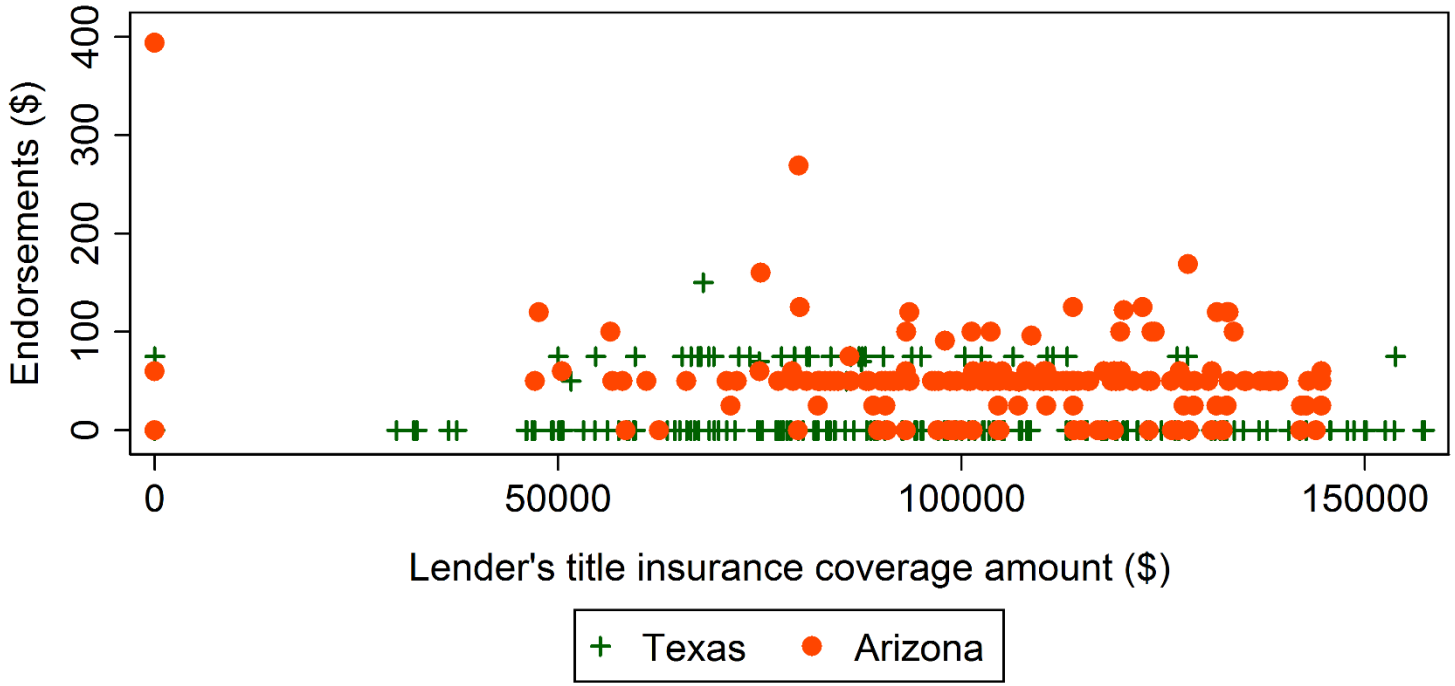
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.2 Comparison of Endorsements Between Texas and Alaska



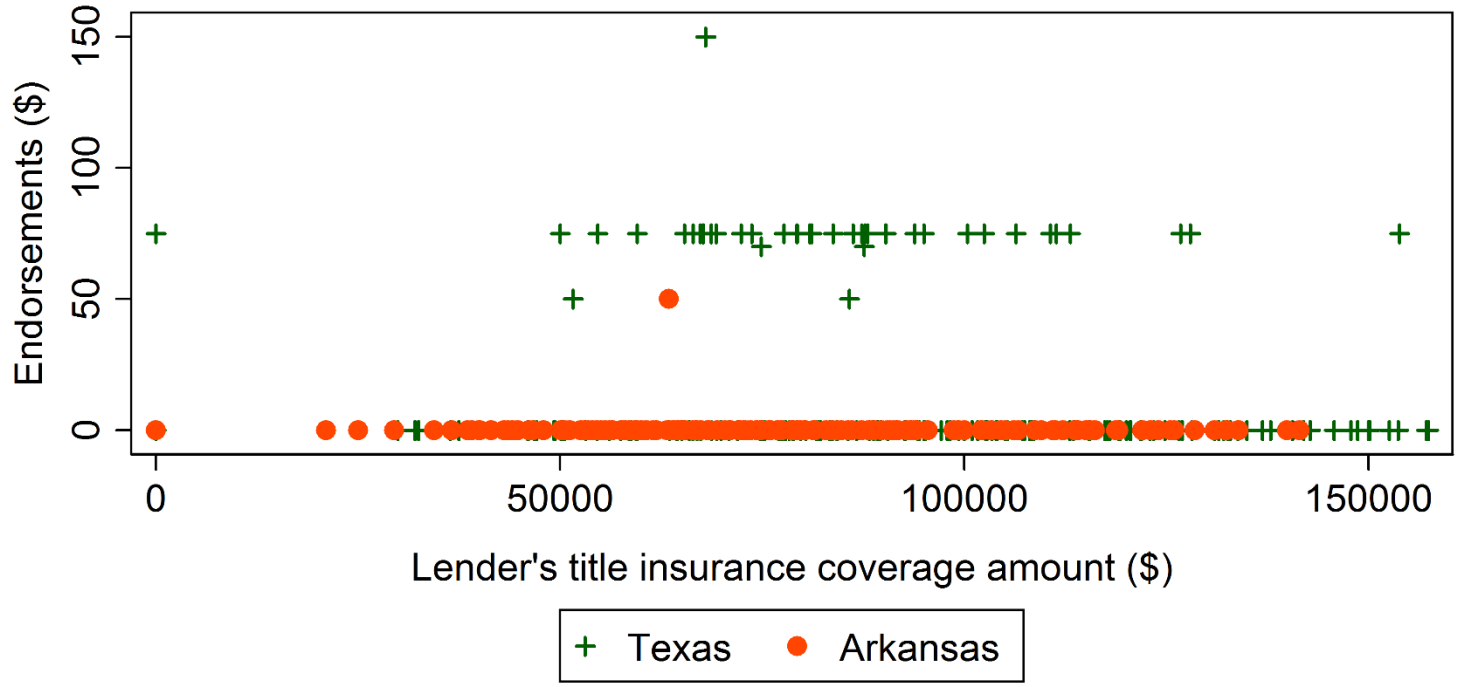
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.3 Comparison of Endorsements Between Texas and Arizona



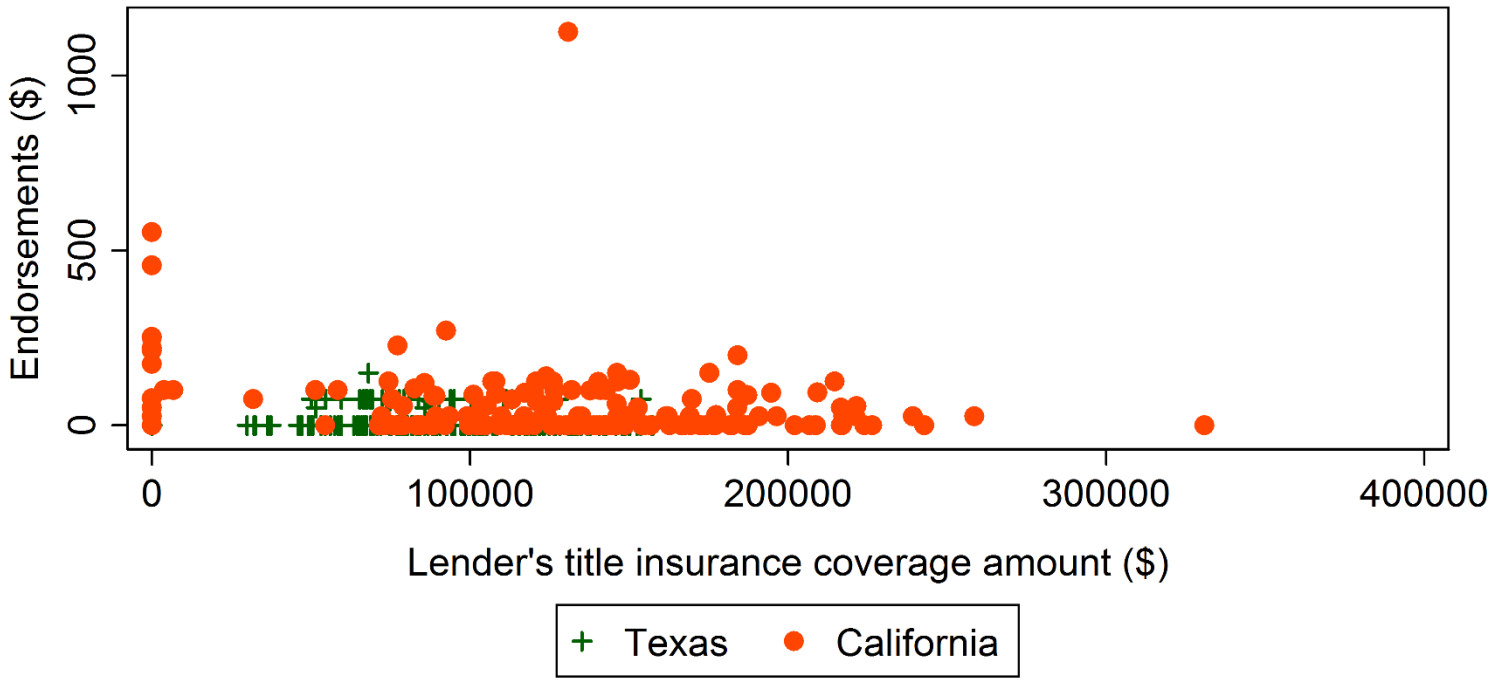
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.4 Comparison of Endorsements Between Texas and Arkansas



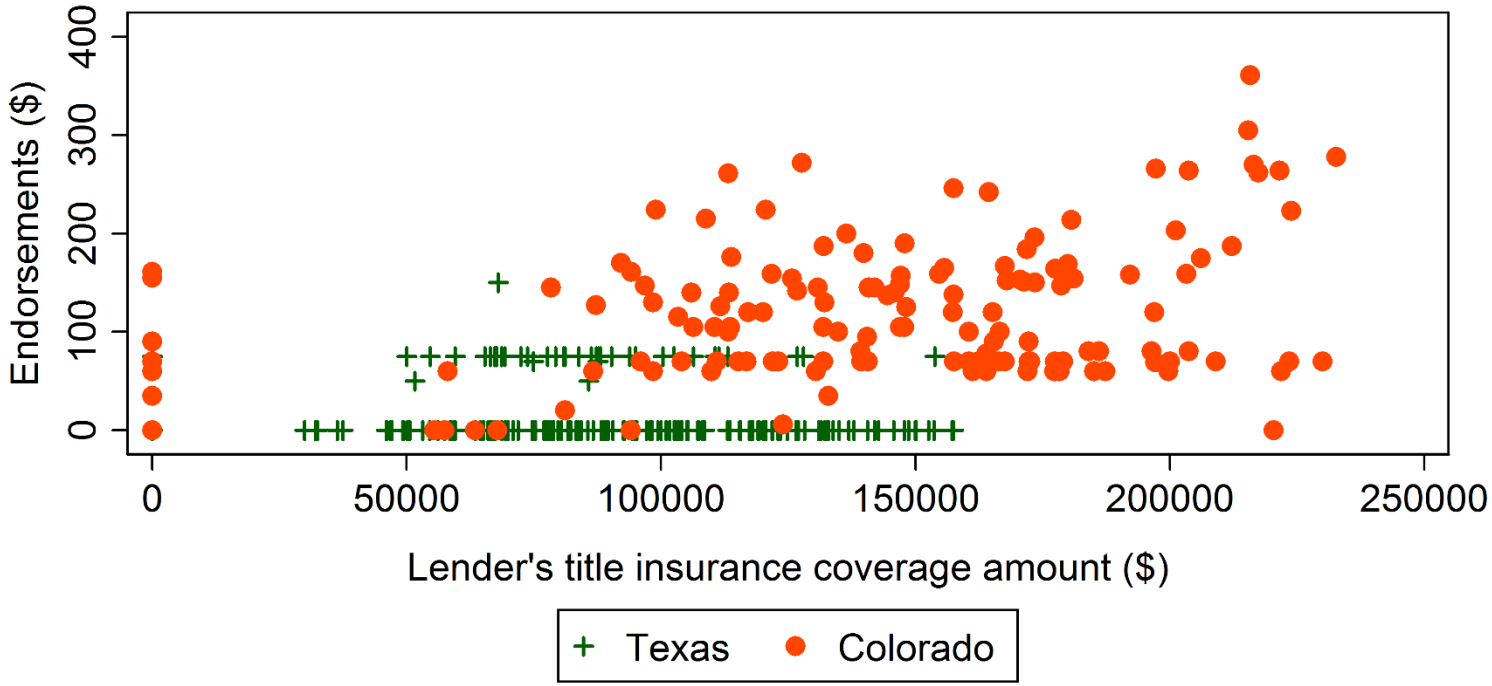
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.5 Comparison of Endorsements Between Texas and California



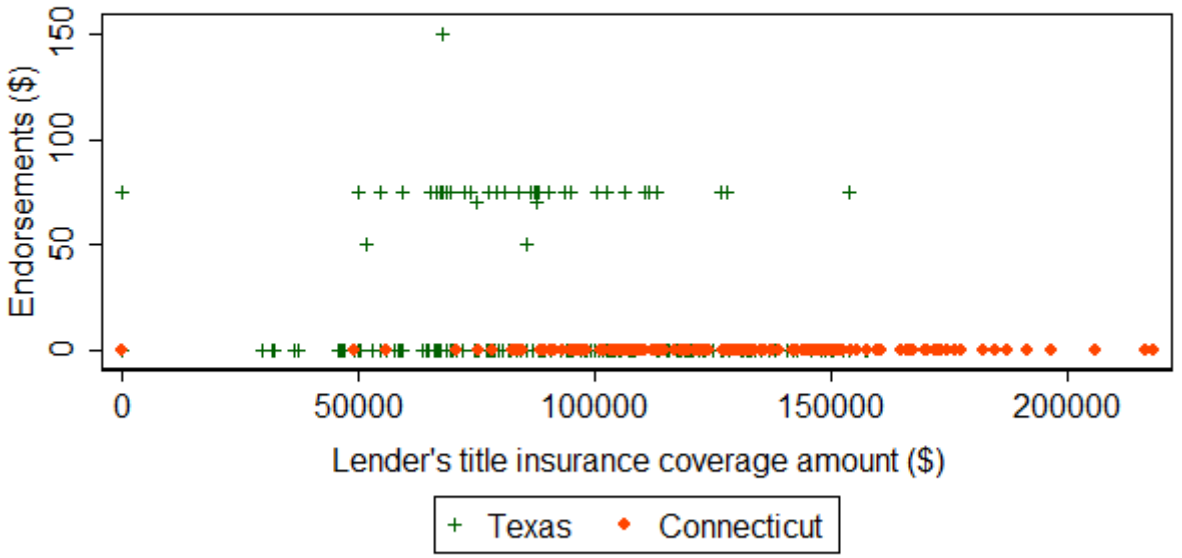
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.6 Comparison of Endorsements Between Texas and Colorado



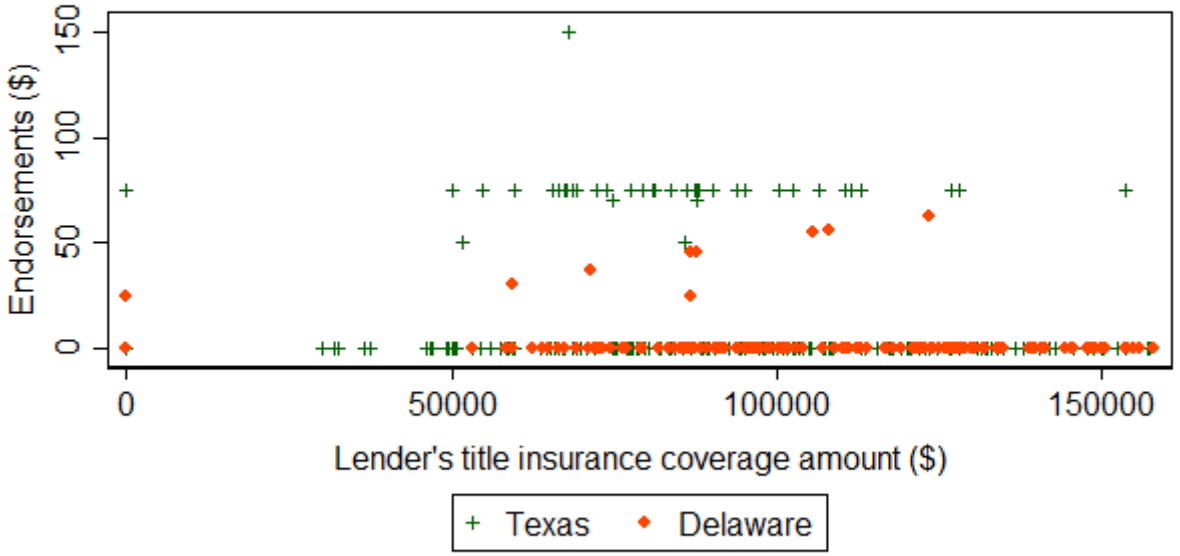
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.7 Comparison of Endorsements Between Texas and Connecticut



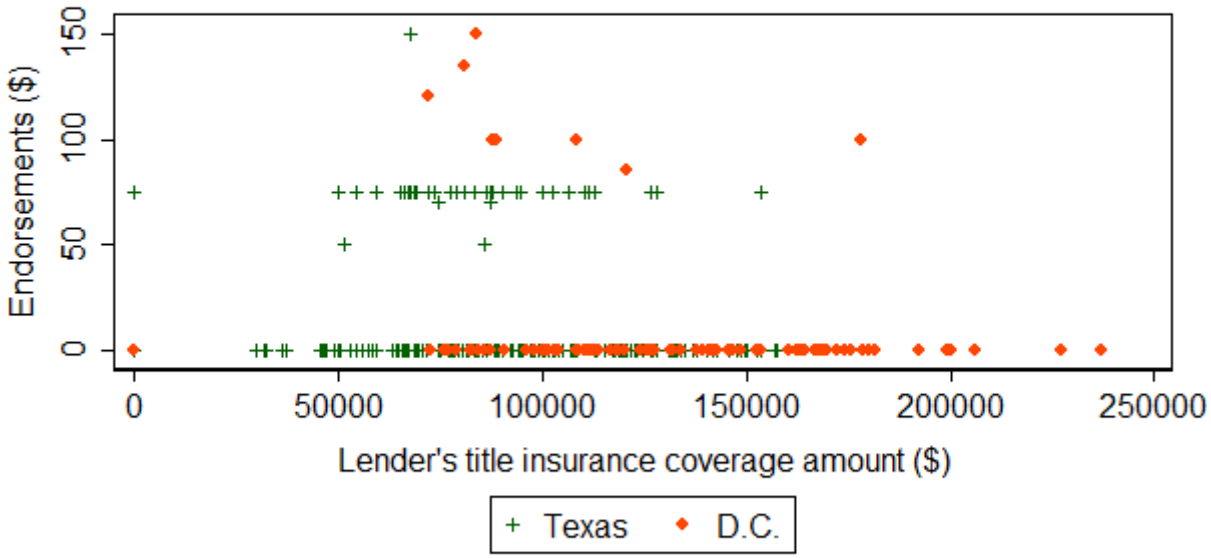
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.8 Comparison of Endorsements Between Texas and Delaware



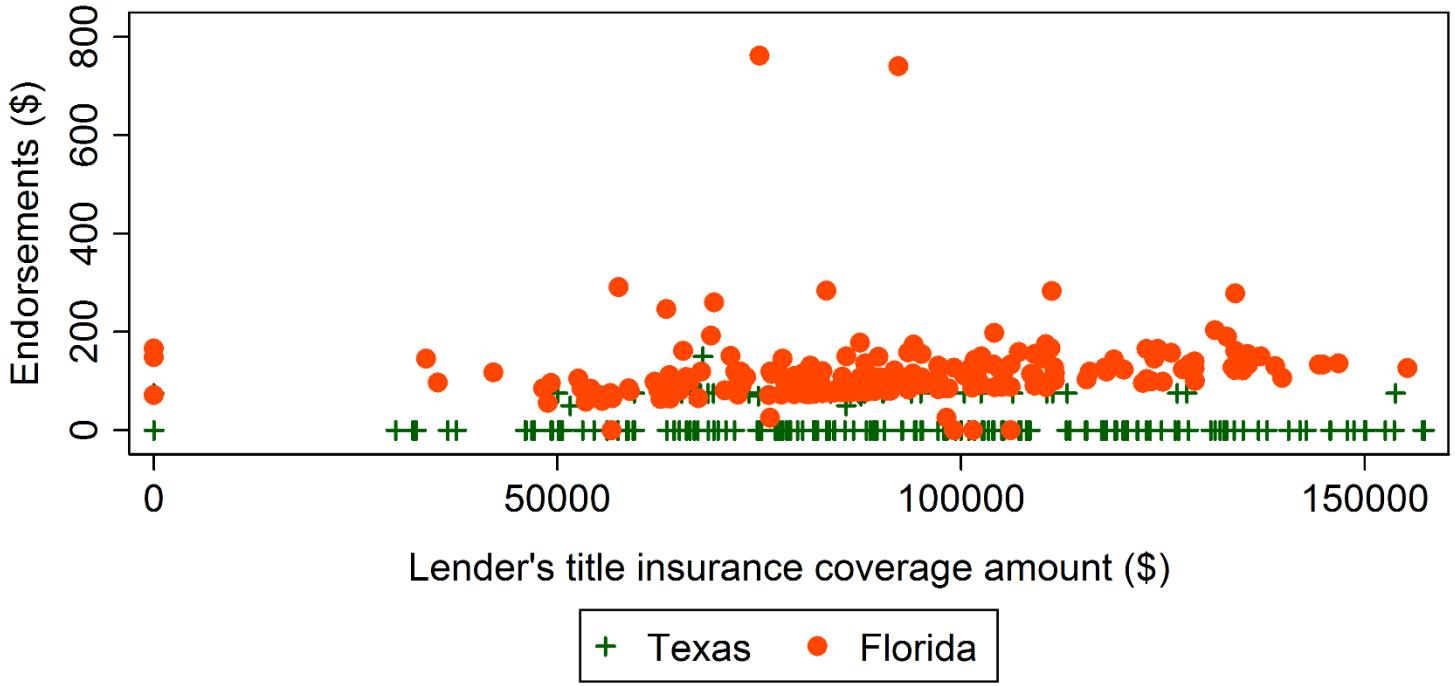
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.9 Comparison of Endorsements Between Texas and D.C.



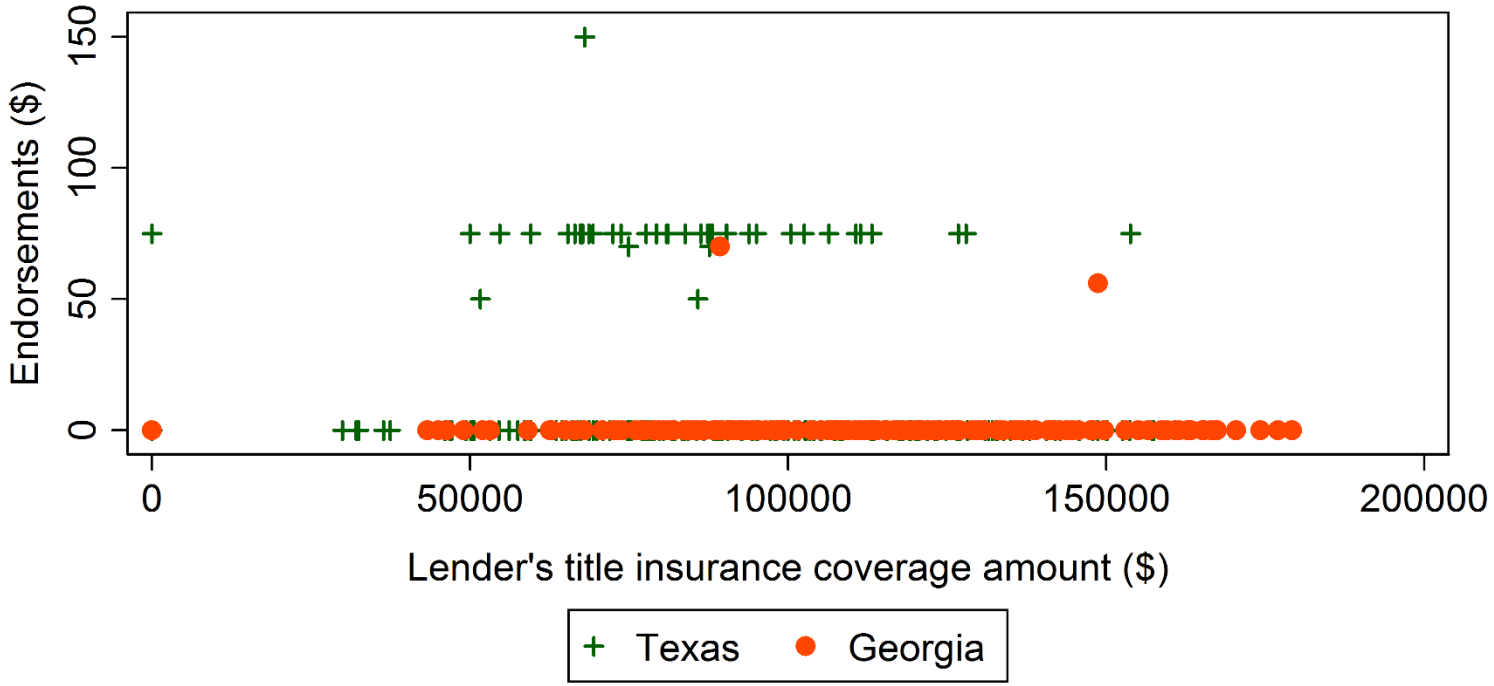
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.10 Comparison of Endorsements Between Texas and Florida



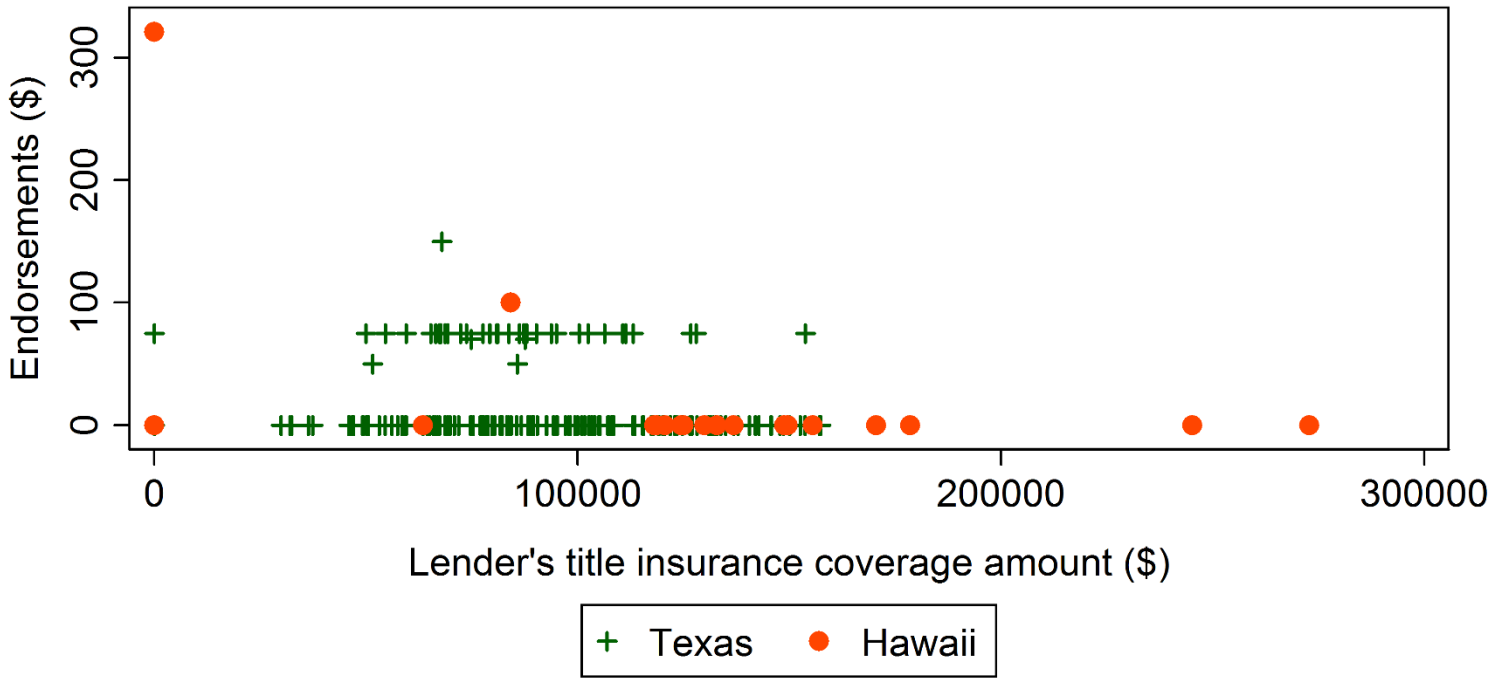
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.11 Comparison of Endorsements Between Texas and Georgia



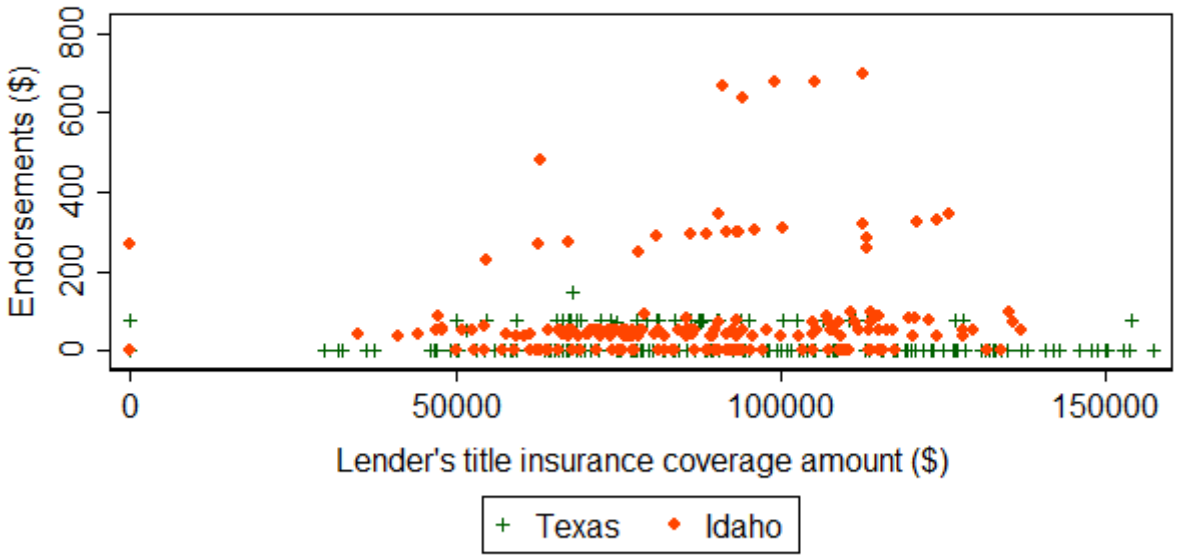
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.12 Comparison of Endorsements Between Texas and Hawaii



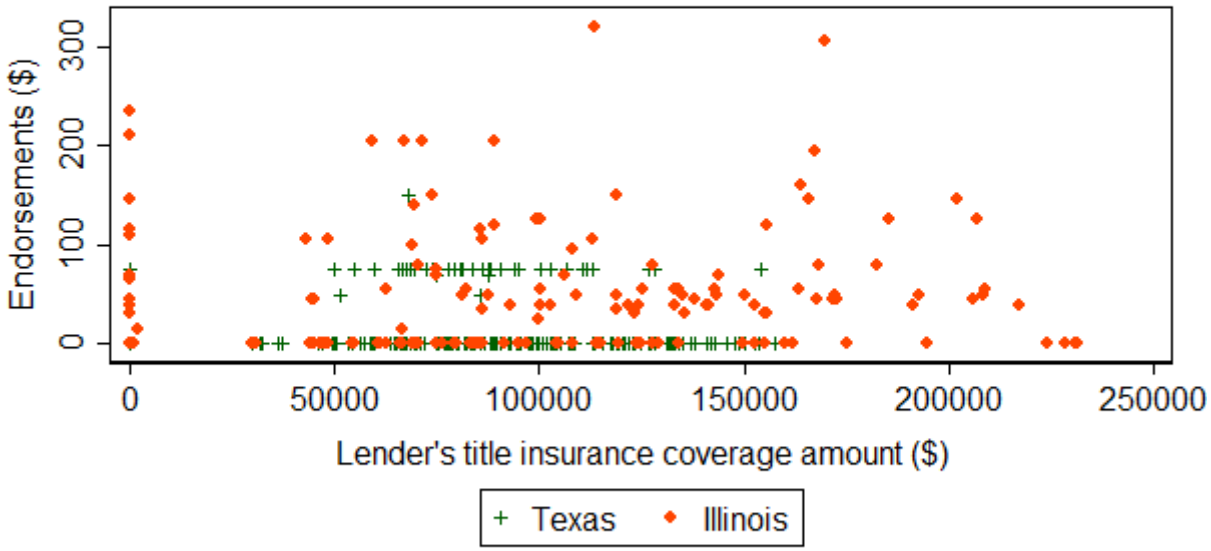
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.13 Comparison of Endorsements Between Texas and Idaho



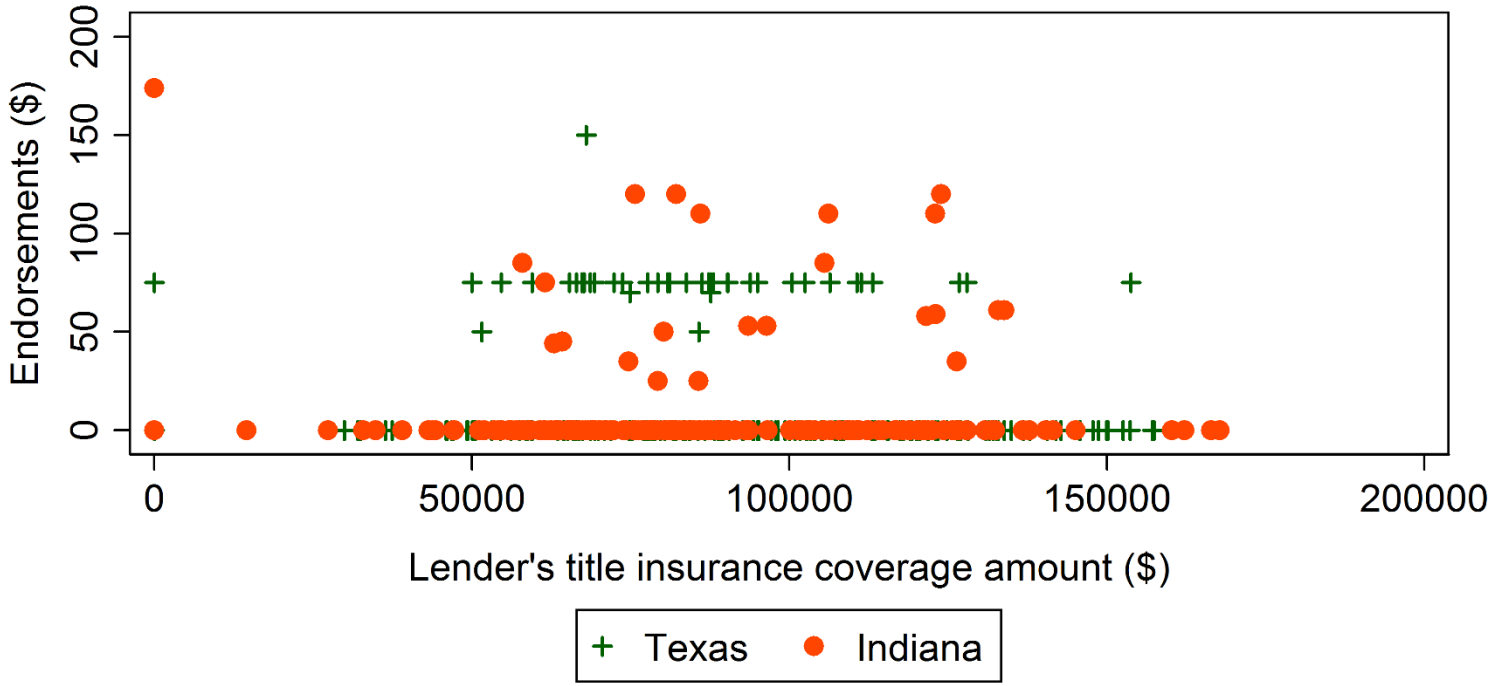
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.14 Comparison of Endorsements Between Texas and Illinois



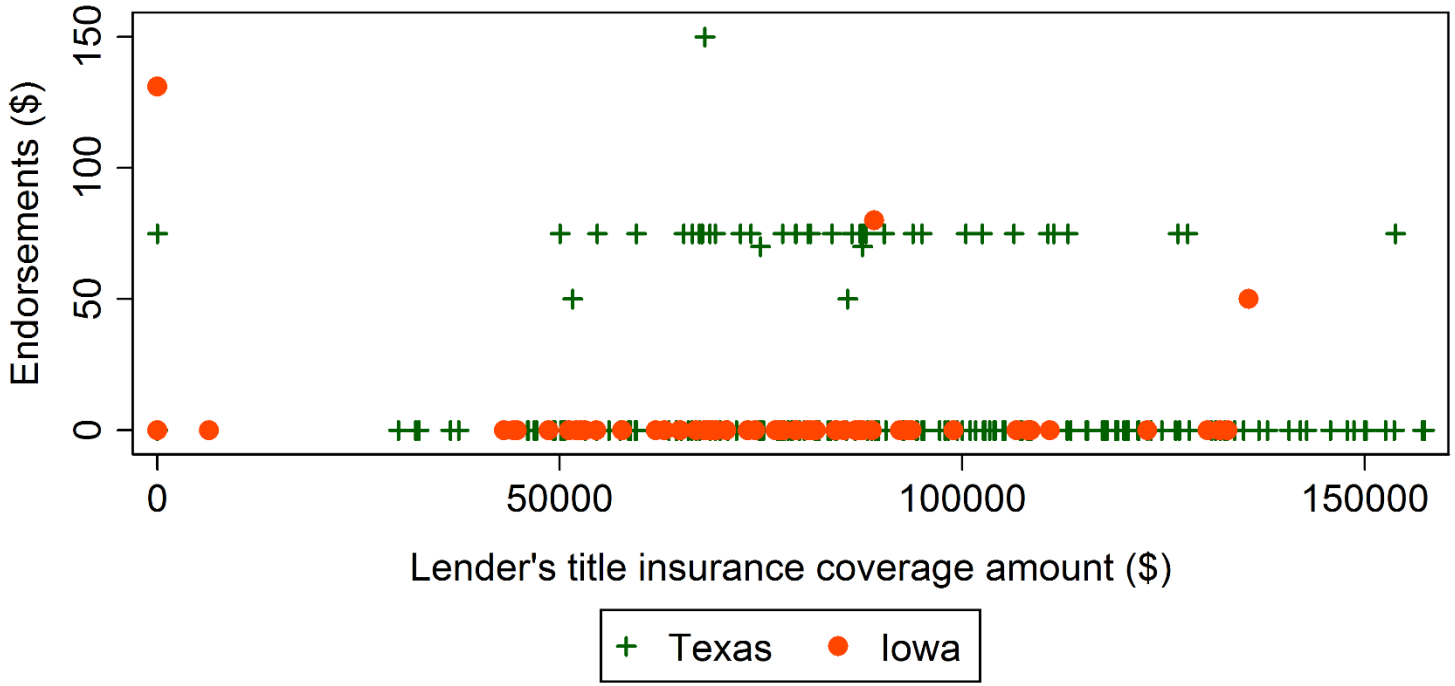
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.15 Comparison of Endorsements Between Texas and Indiana



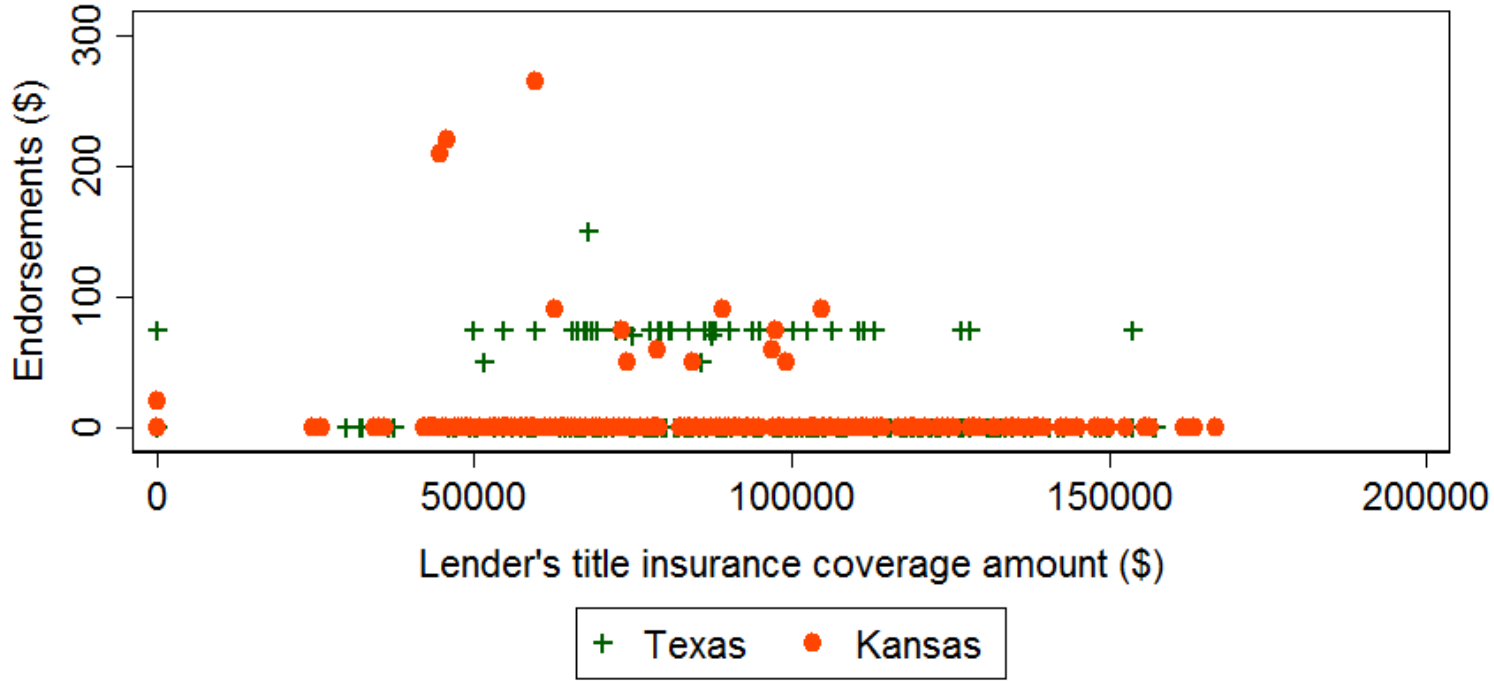
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.16 Comparison of Endorsements Between Texas and Iowa



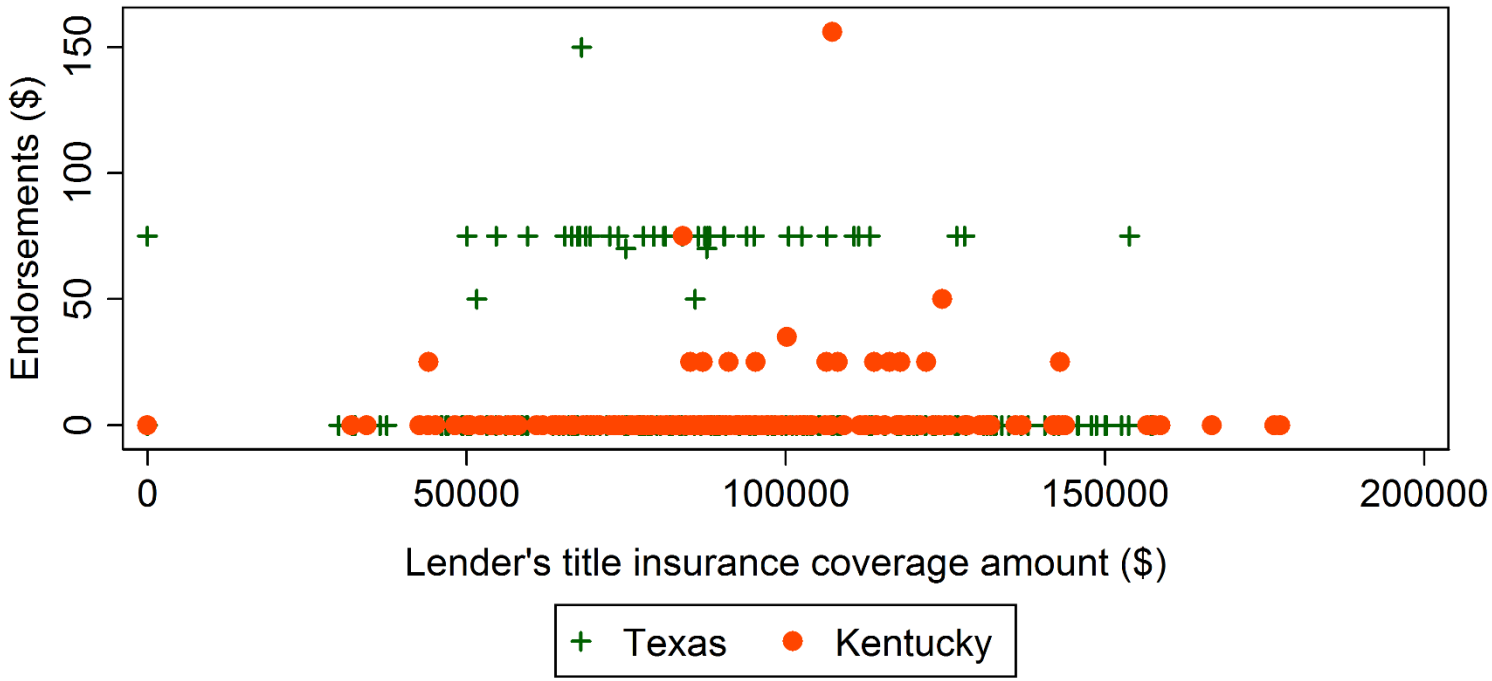
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.17 Comparison of Endorsements Between Texas and Kansas



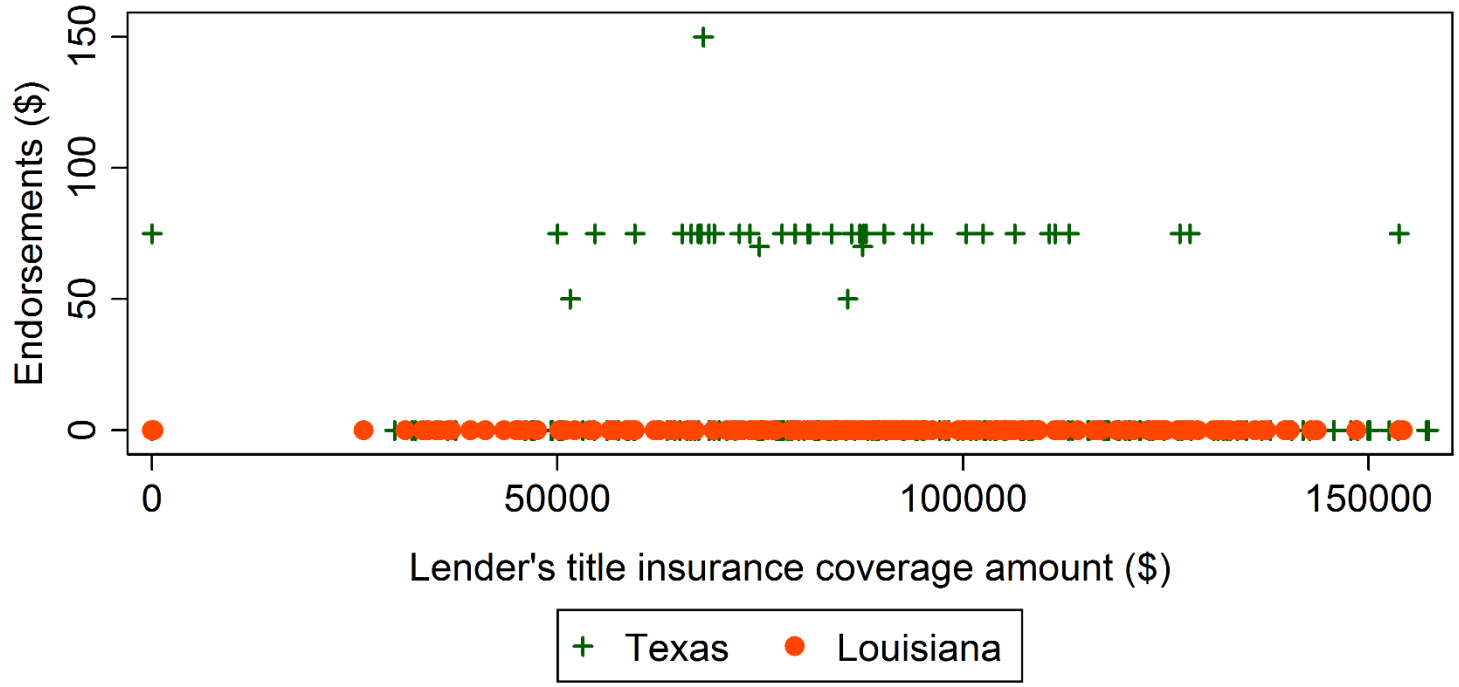
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.18 Comparison of Endorsements Between Texas and Kentucky



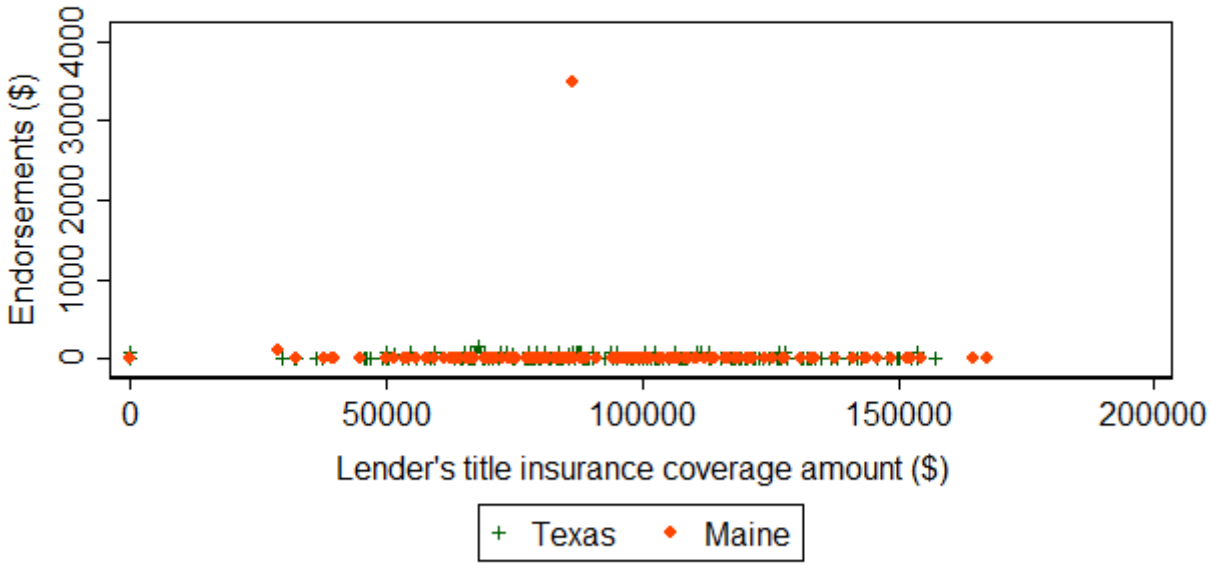
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.19 Comparison of Endorsements Between Texas and Louisiana



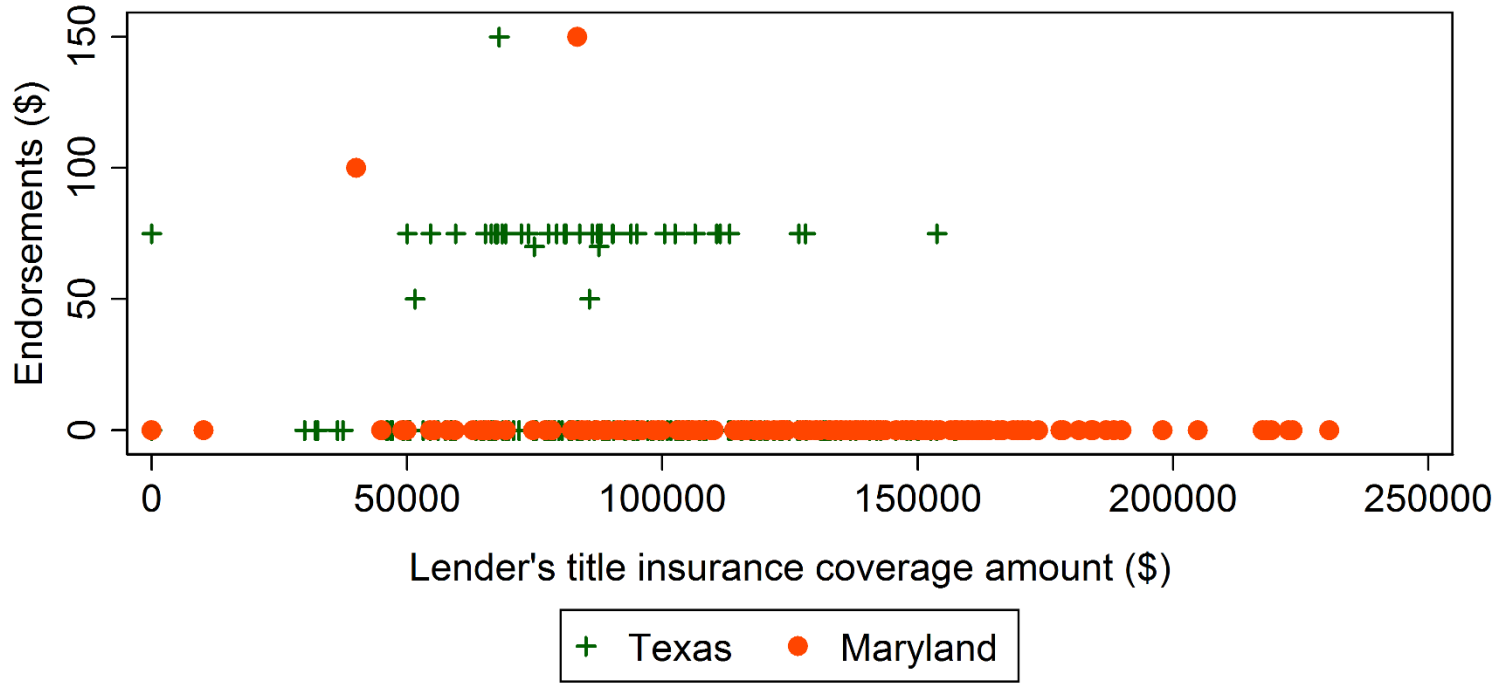
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.20 Comparison of Endorsements Between Texas and Maine



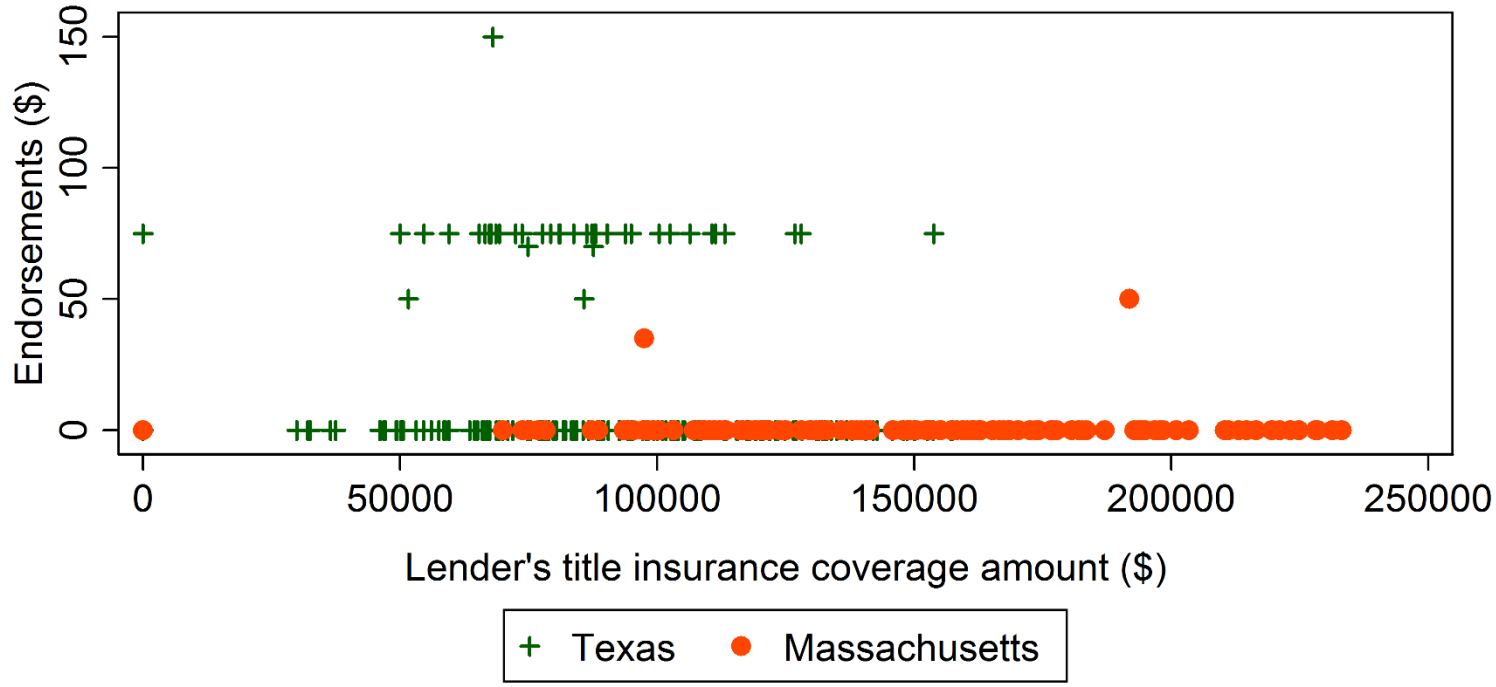
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.21 Comparison of Endorsements Between Texas and Maryland



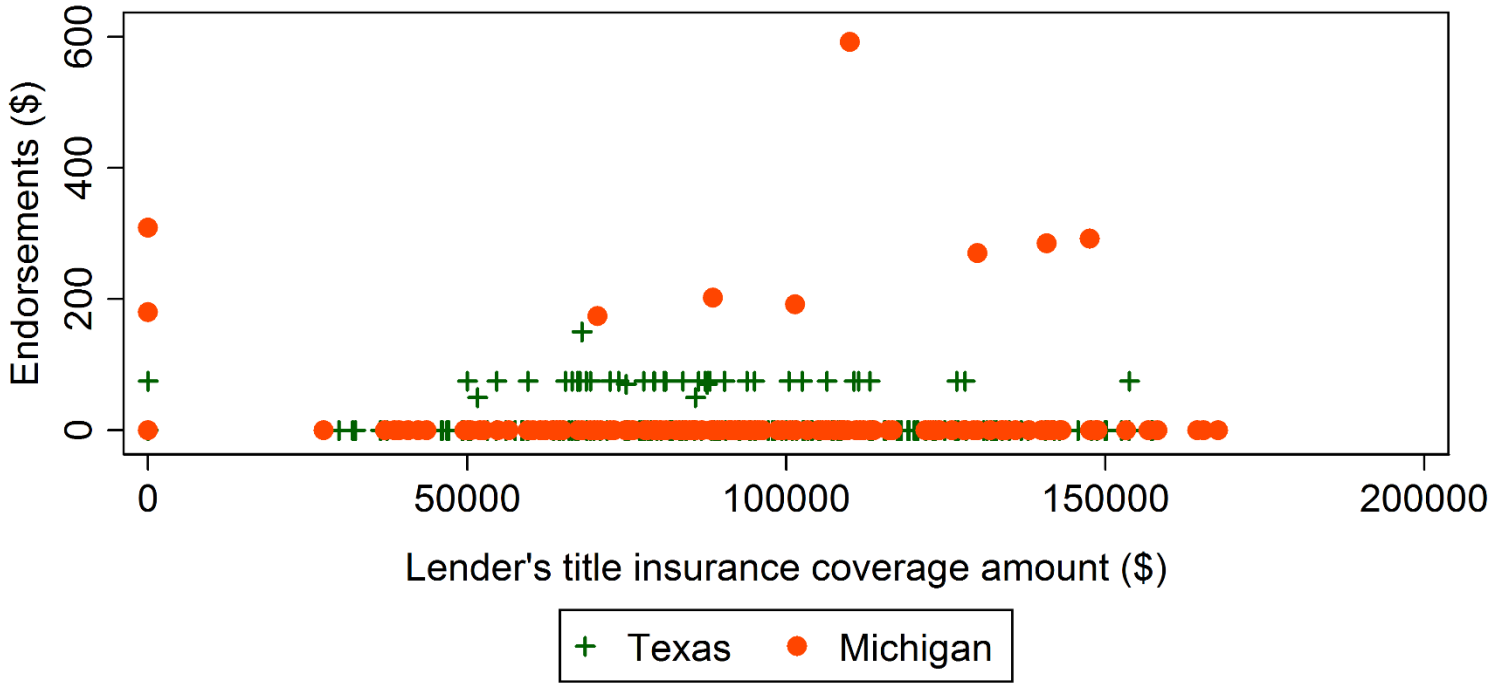
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.22 Comparison of Endorsements Between Texas and Massachusetts



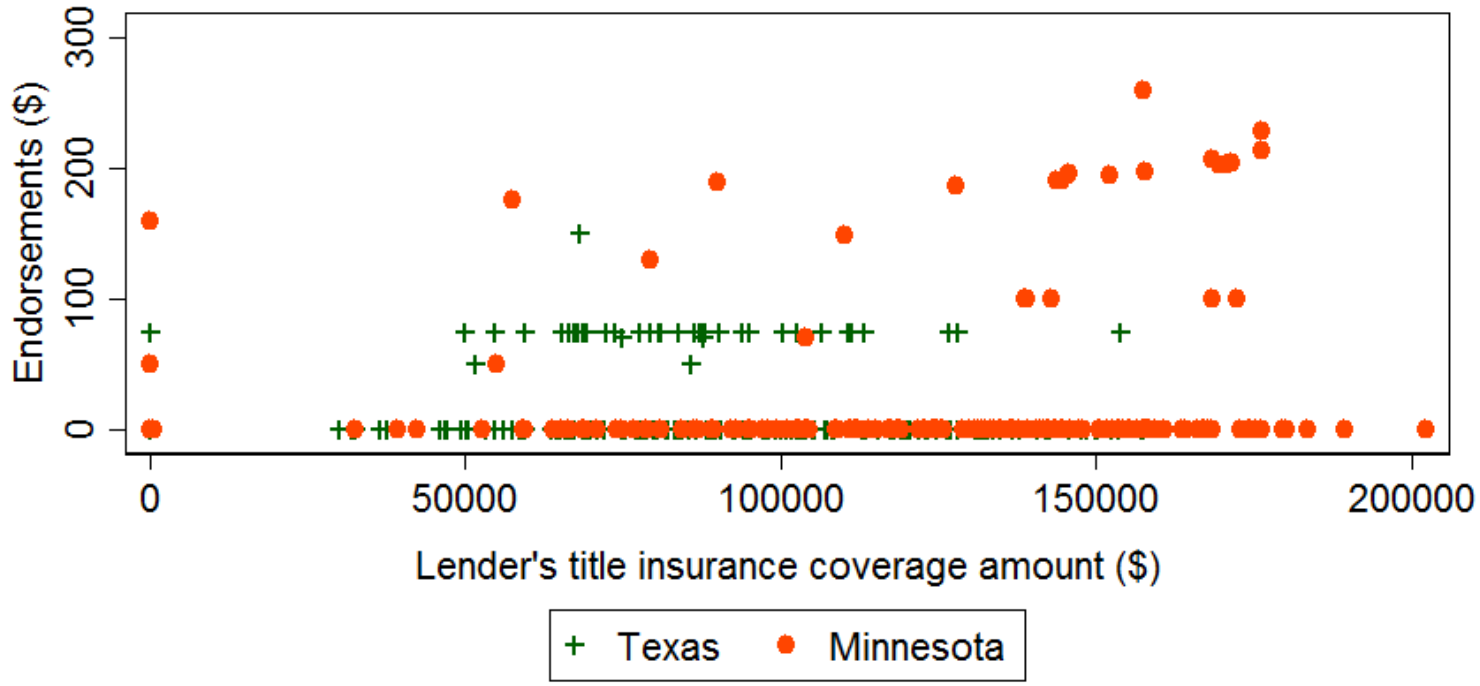
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.23 Comparison of Endorsements Between Texas and Michigan



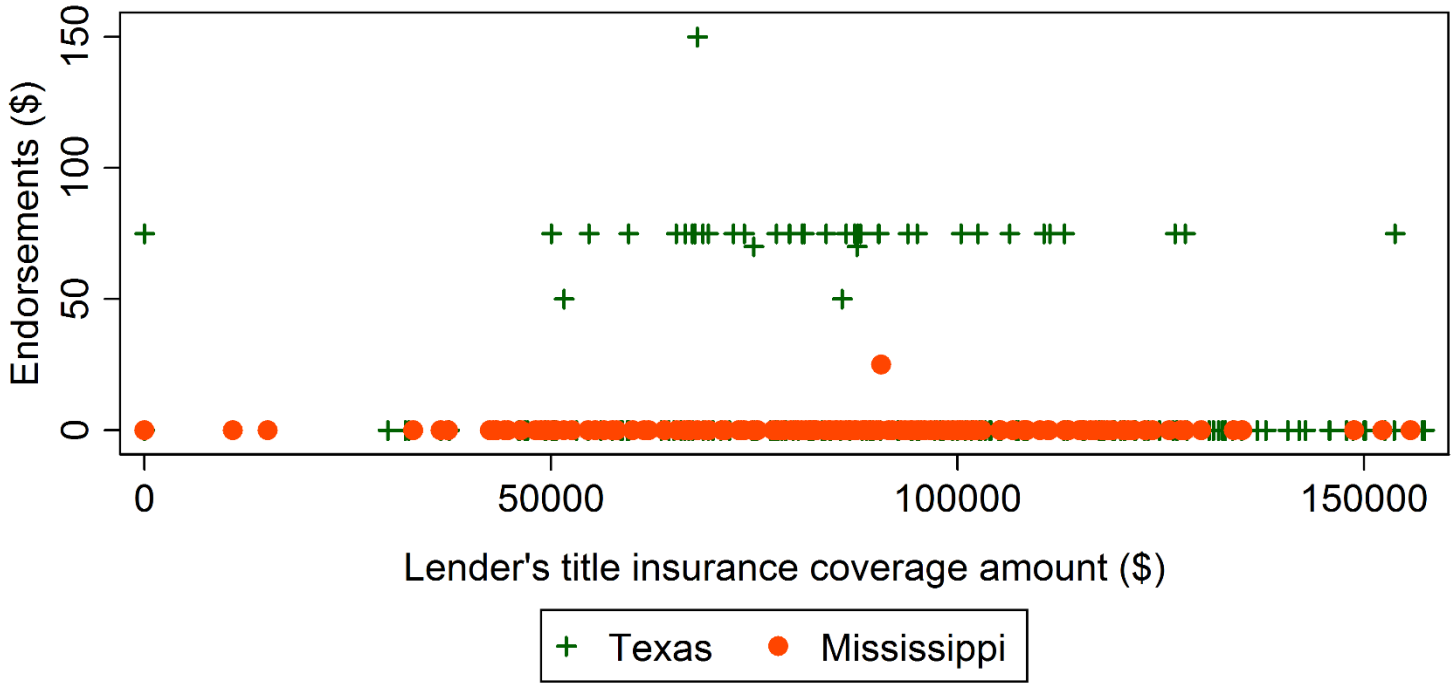
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.24 Comparison of Endorsements Between Texas and Minnesota



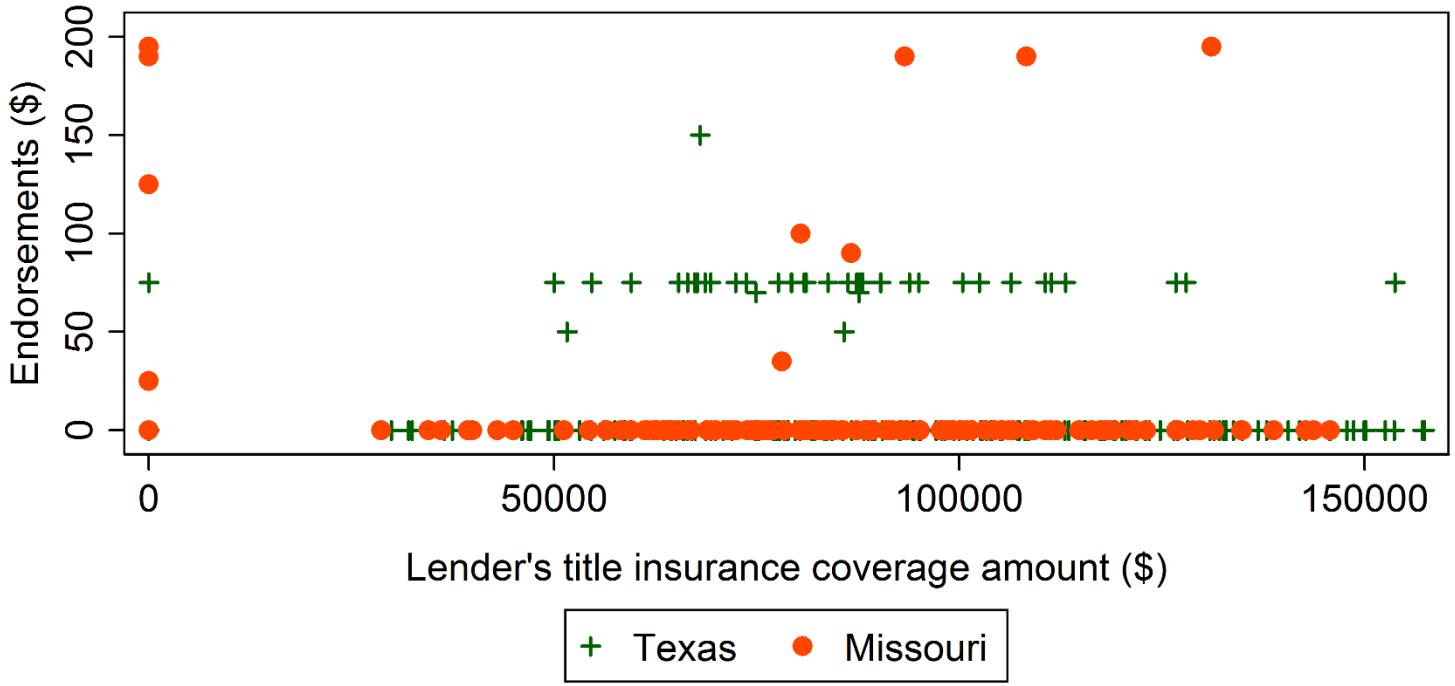
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.25 Comparison of Endorsements Between Texas and Mississippi



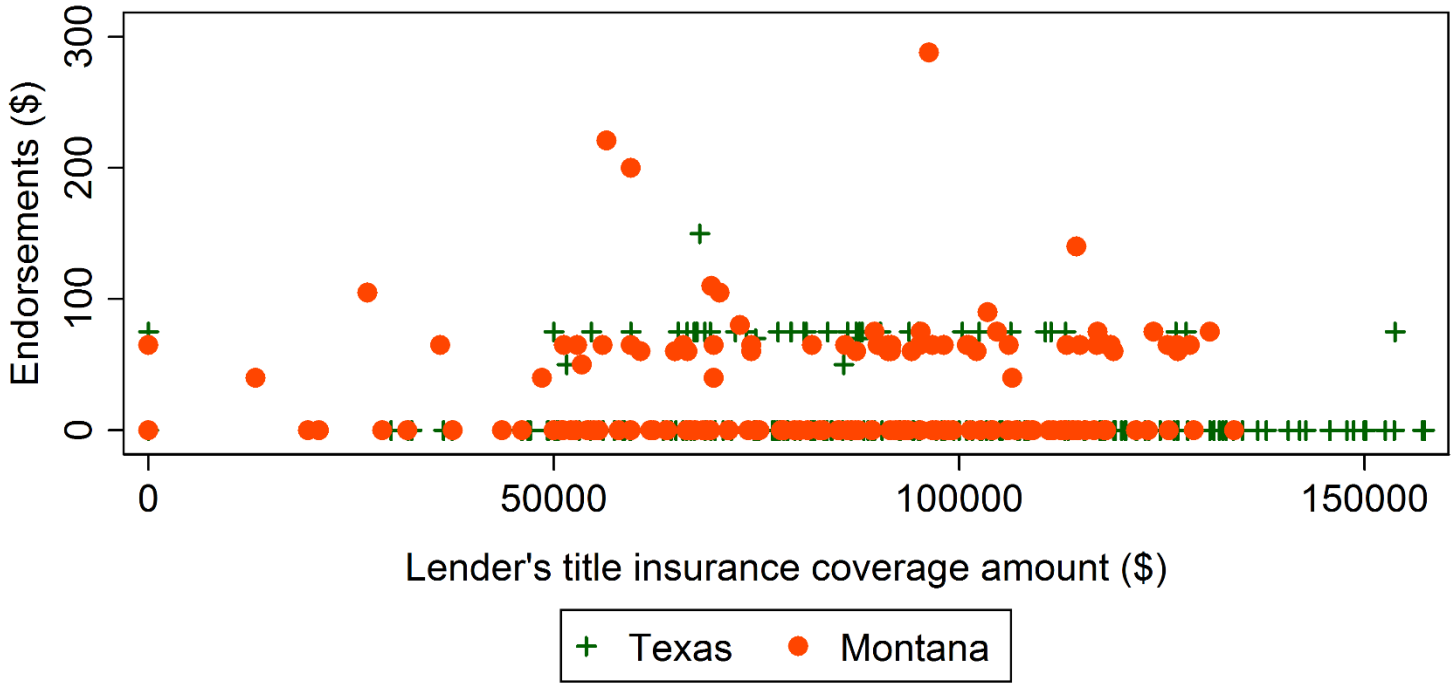
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.26 Comparison of Endorsements Between Texas and Missouri



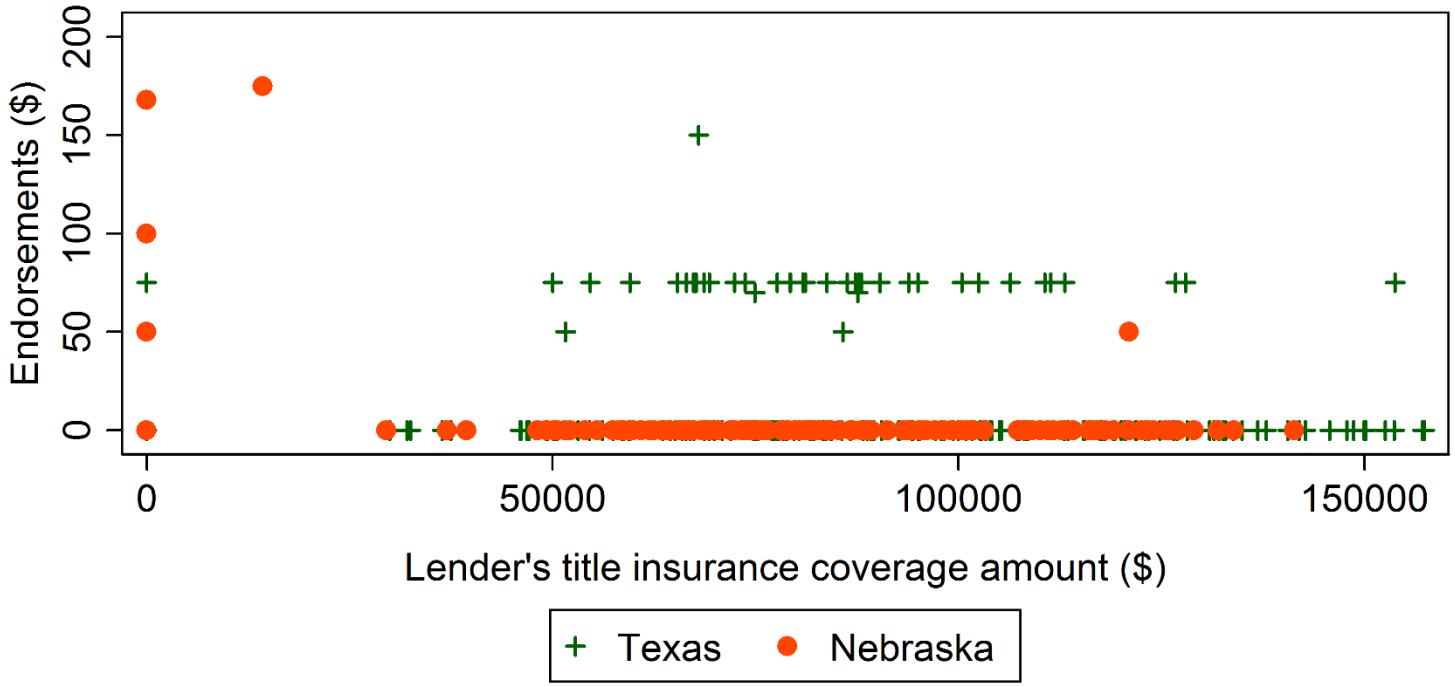
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.27 Comparison of Endorsements Between Texas and Montana



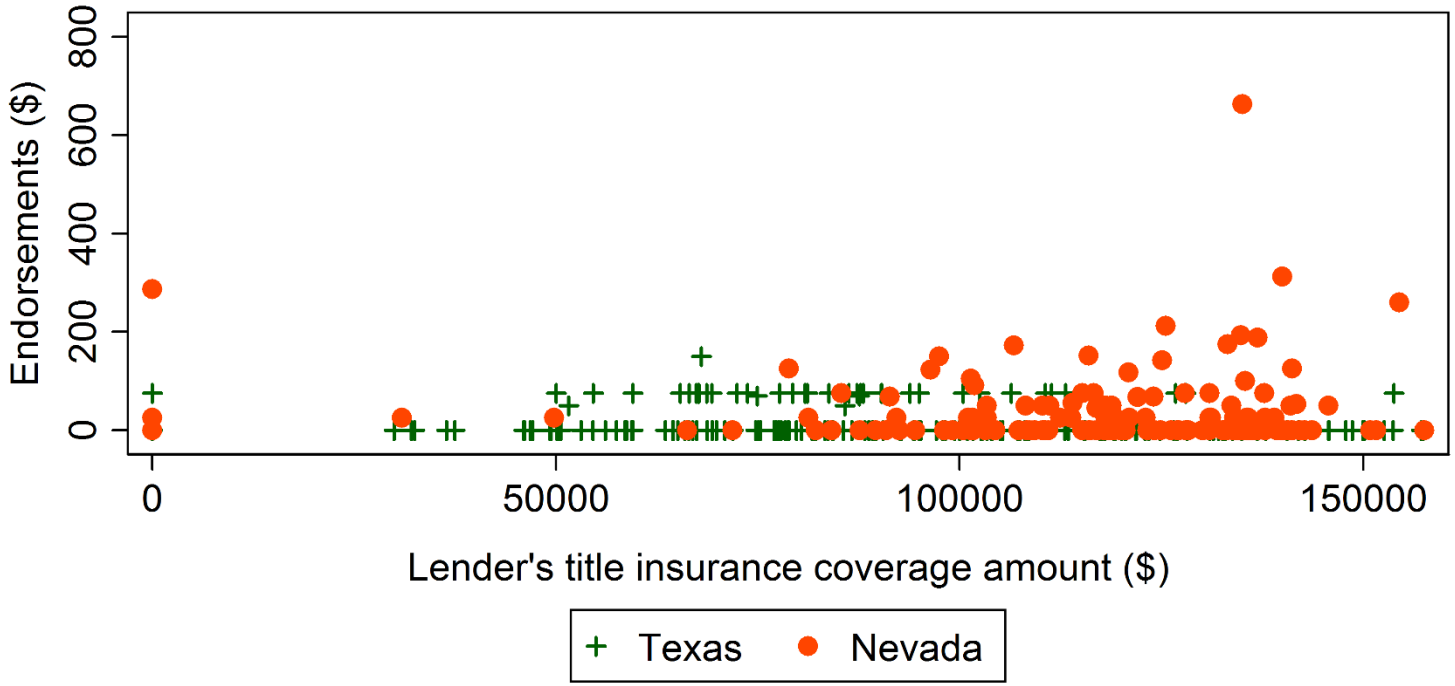
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.28 Comparison of Endorsements Between Texas and Nebraska



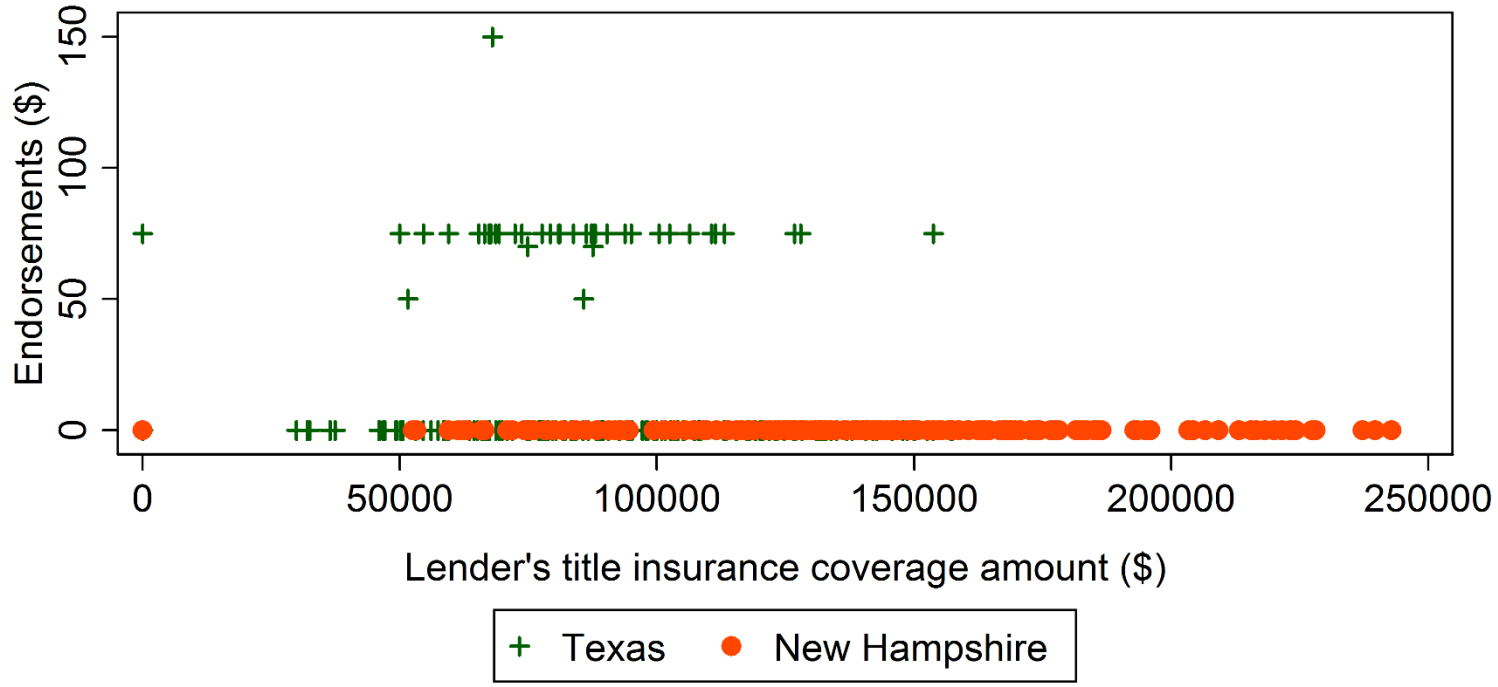
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.29 Comparison of Endorsements Between Texas and Nevada



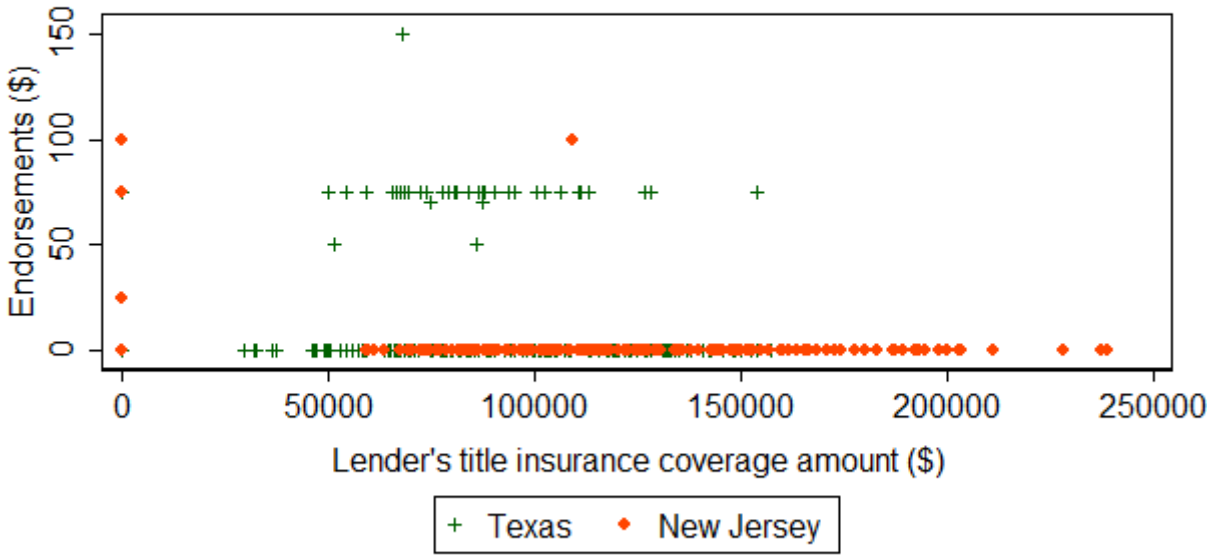
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.30 Comparison of Endorsements Between Texas and New Hampshire



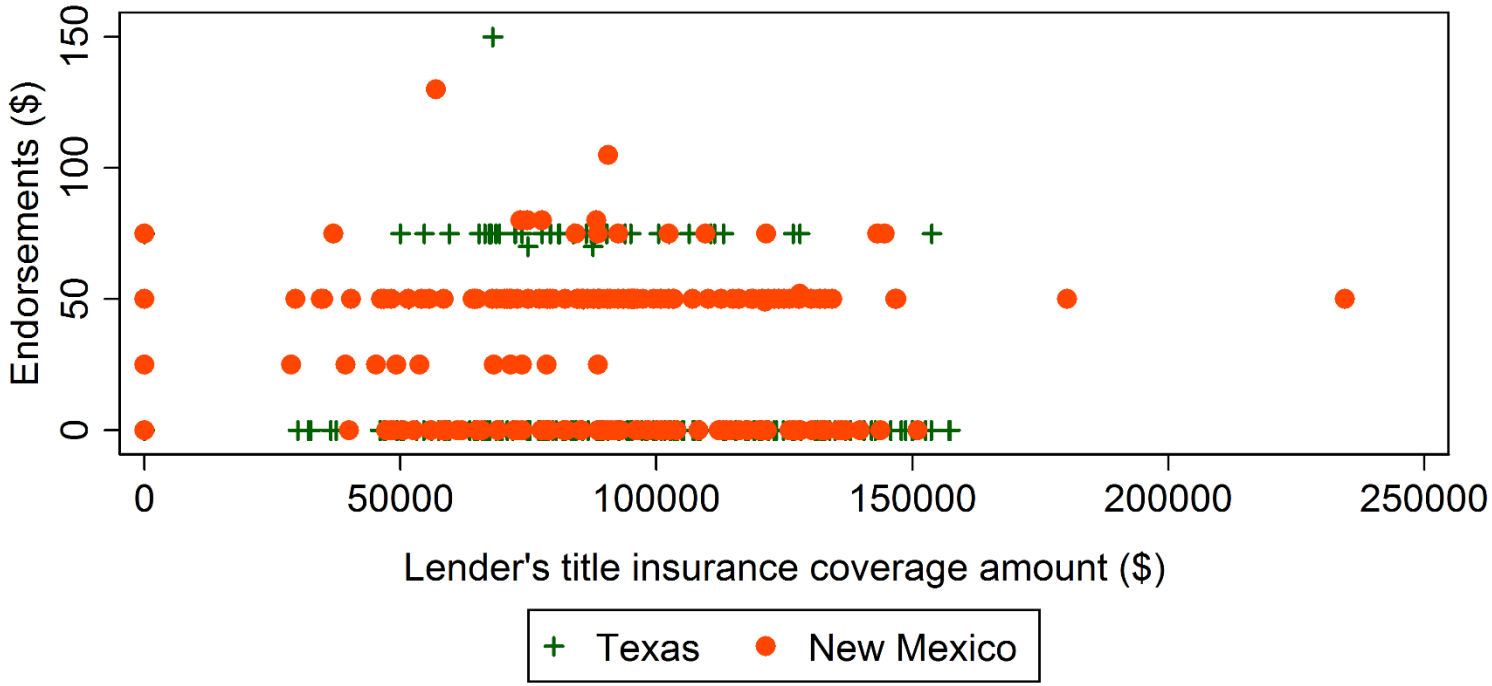
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.31 Comparison of Endorsements Between Texas and New Jersey



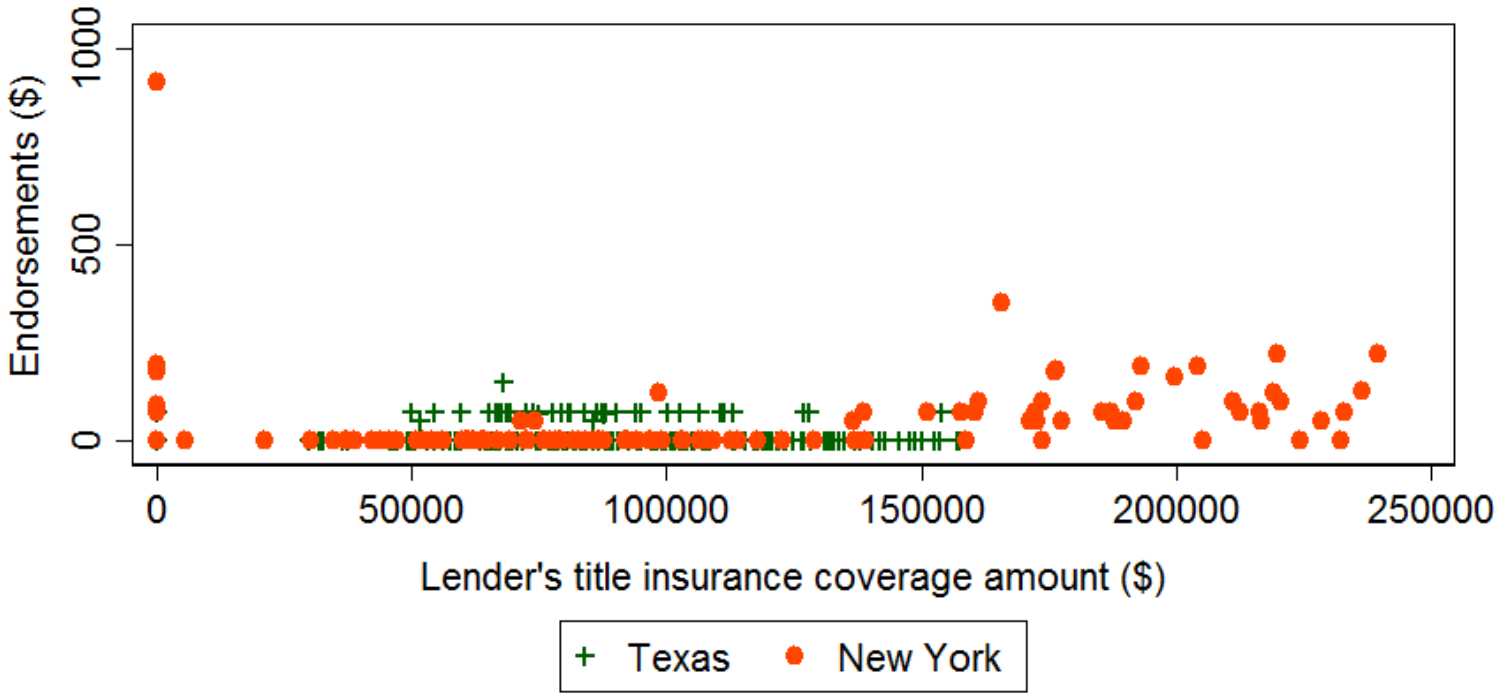
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.32 Comparison of Endorsements Between Texas and New Mexico



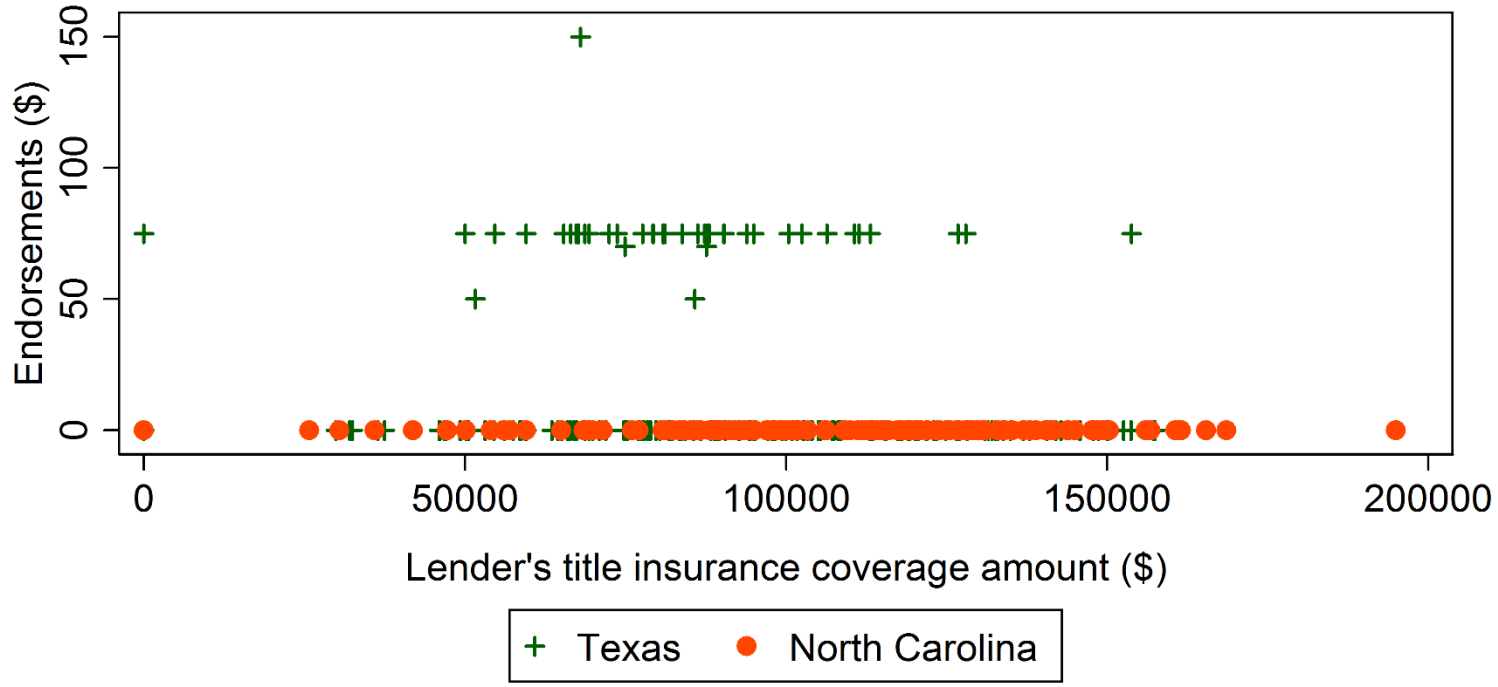
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.33 Comparison of Endorsements Between Texas and New York



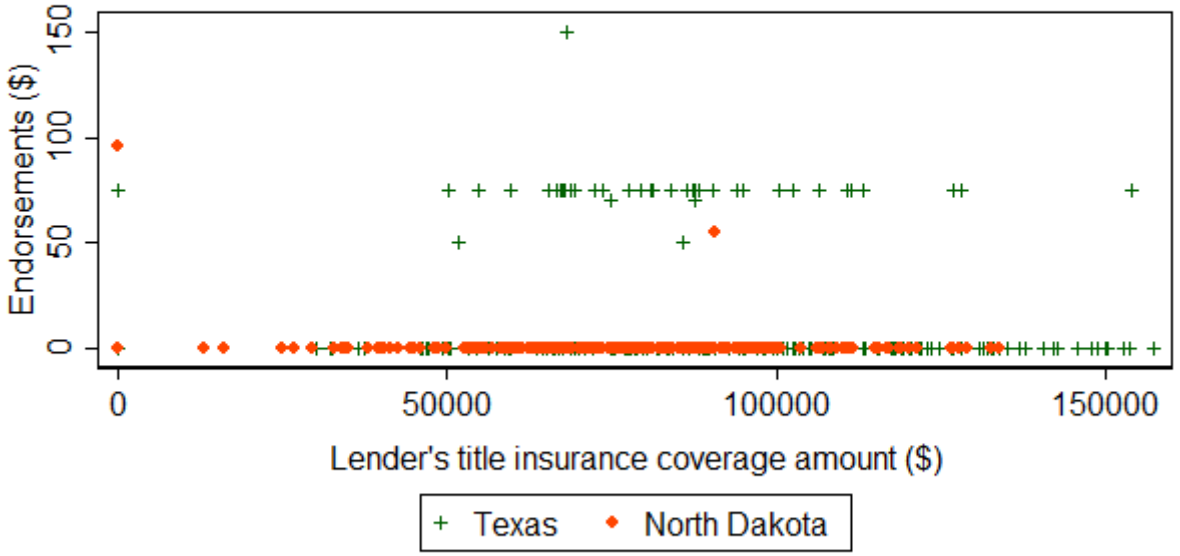
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.34 Comparison of Endorsements Between Texas and North Carolina



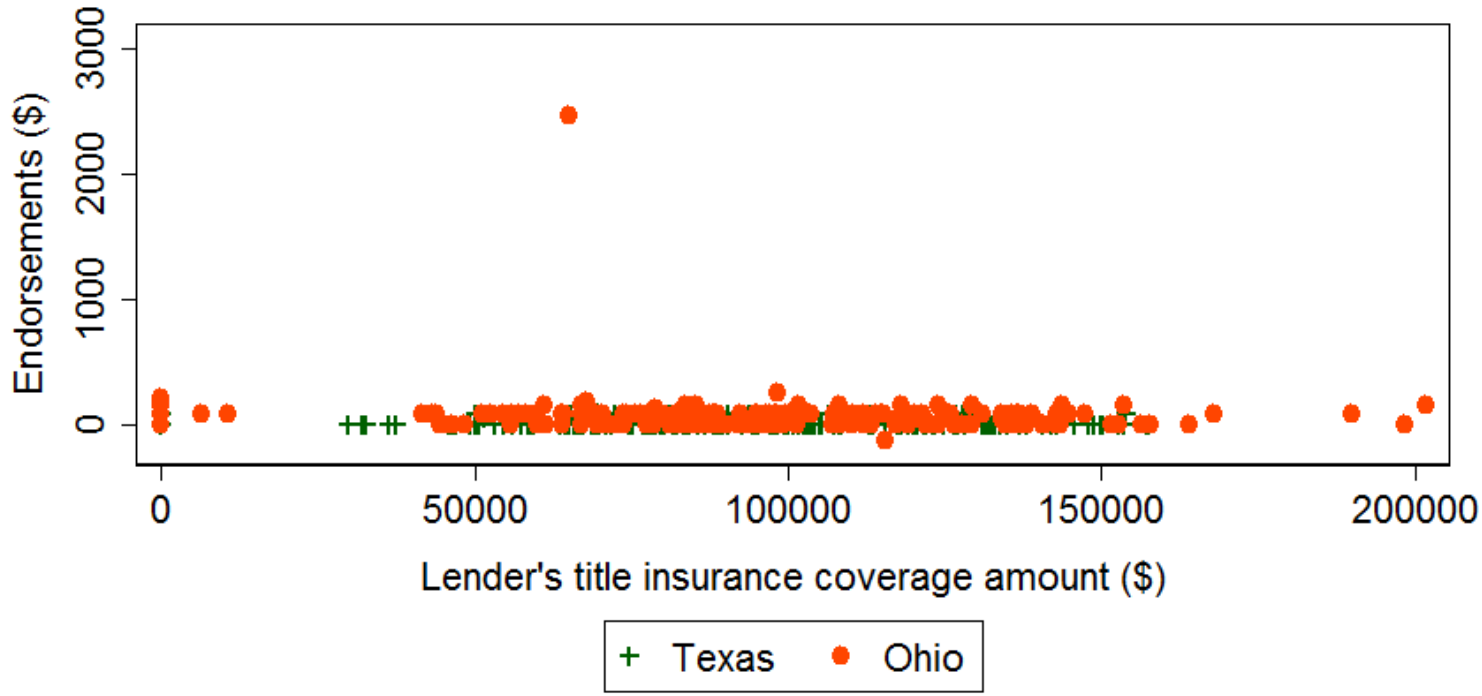
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.35 Comparison of Endorsements Between Texas and North Dakota



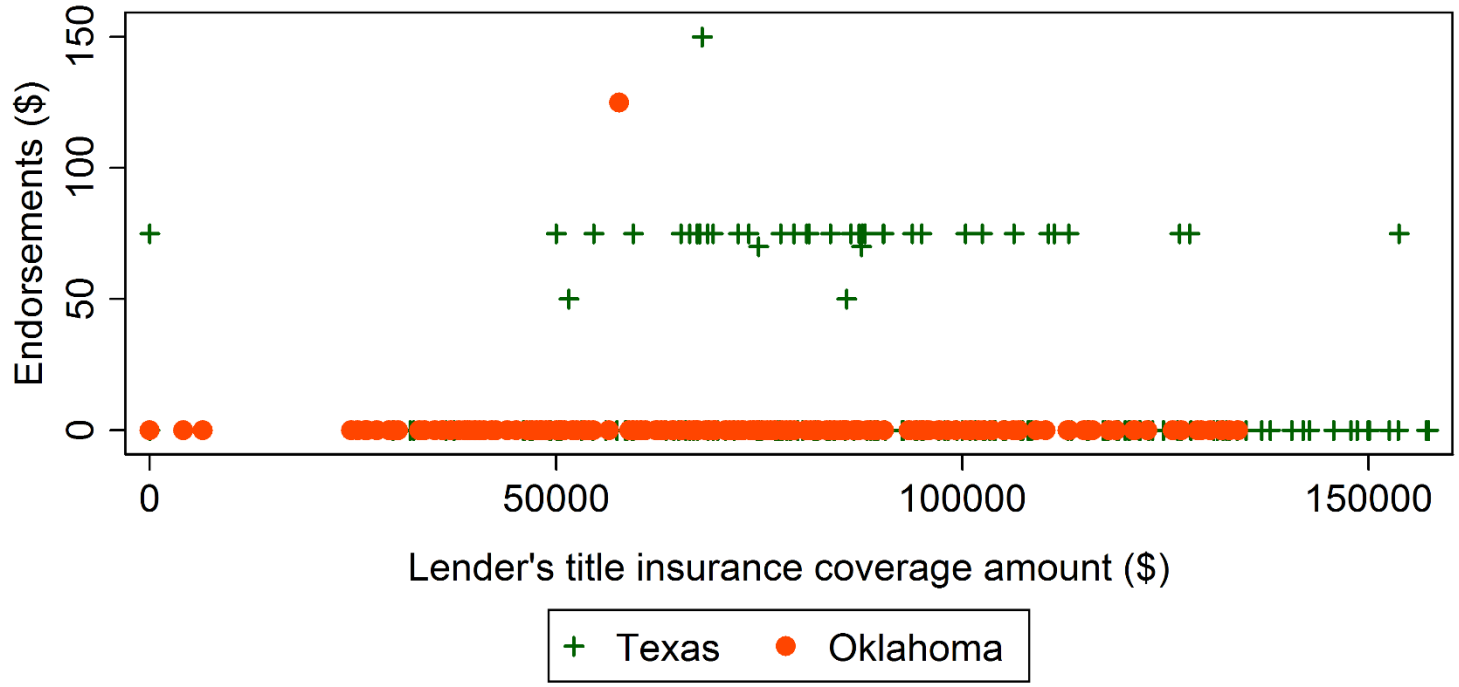
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.36 Comparison of Endorsements Between Texas and Ohio



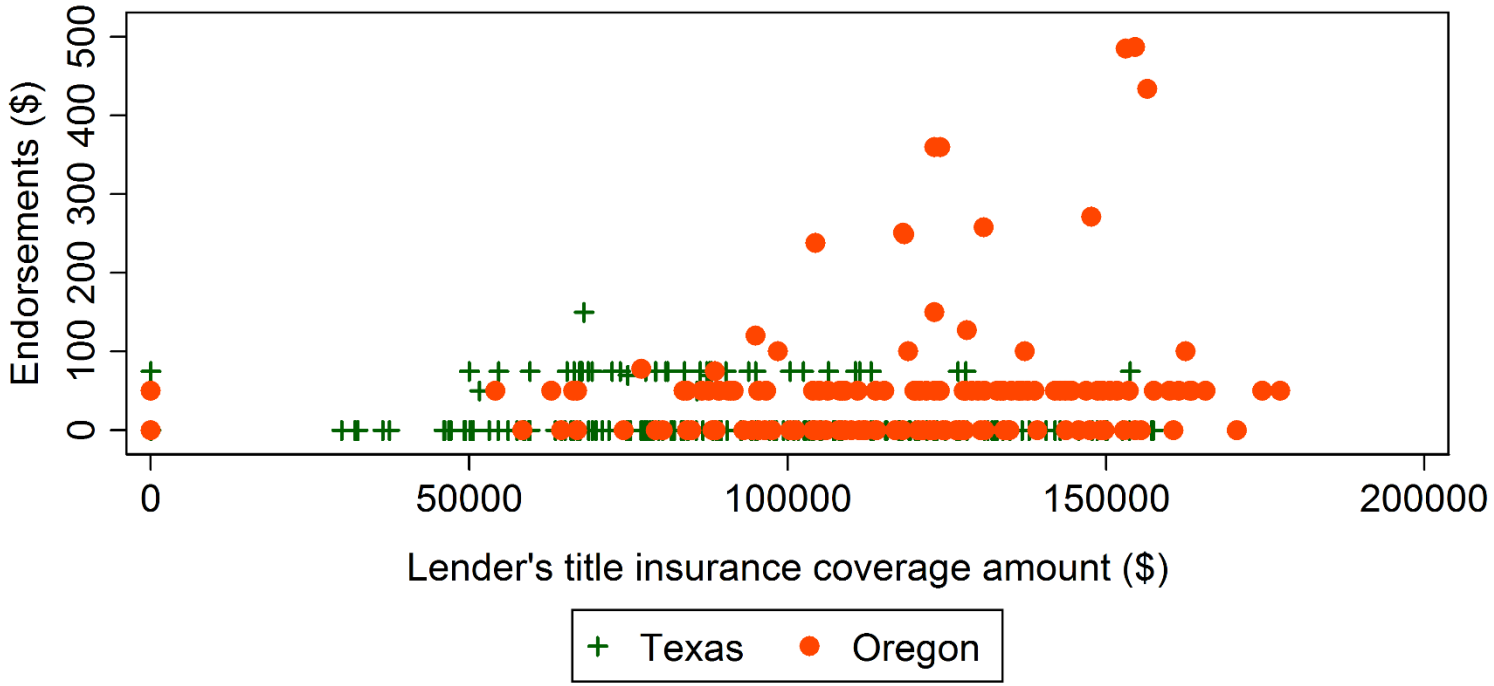
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.37 Comparison of Endorsements Between Texas and Oklahoma



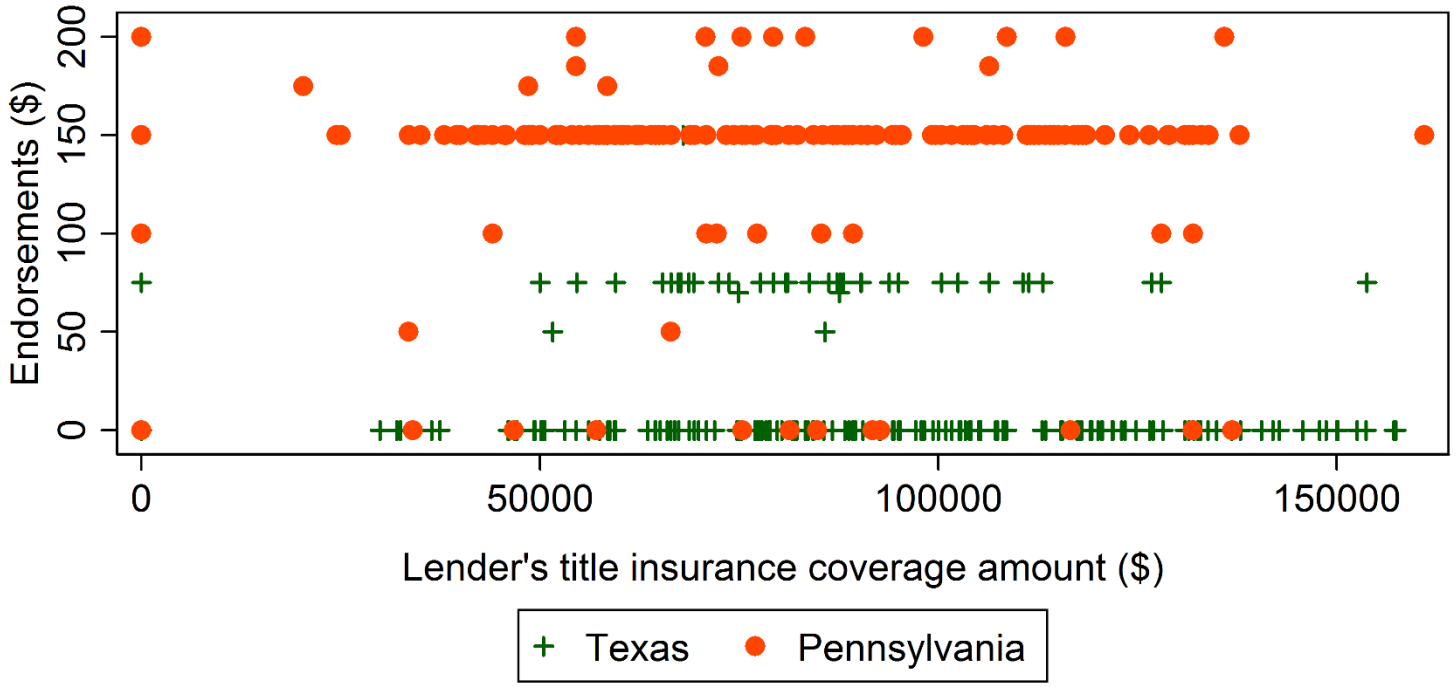
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.38 Comparison of Endorsements Between Texas and Oregon



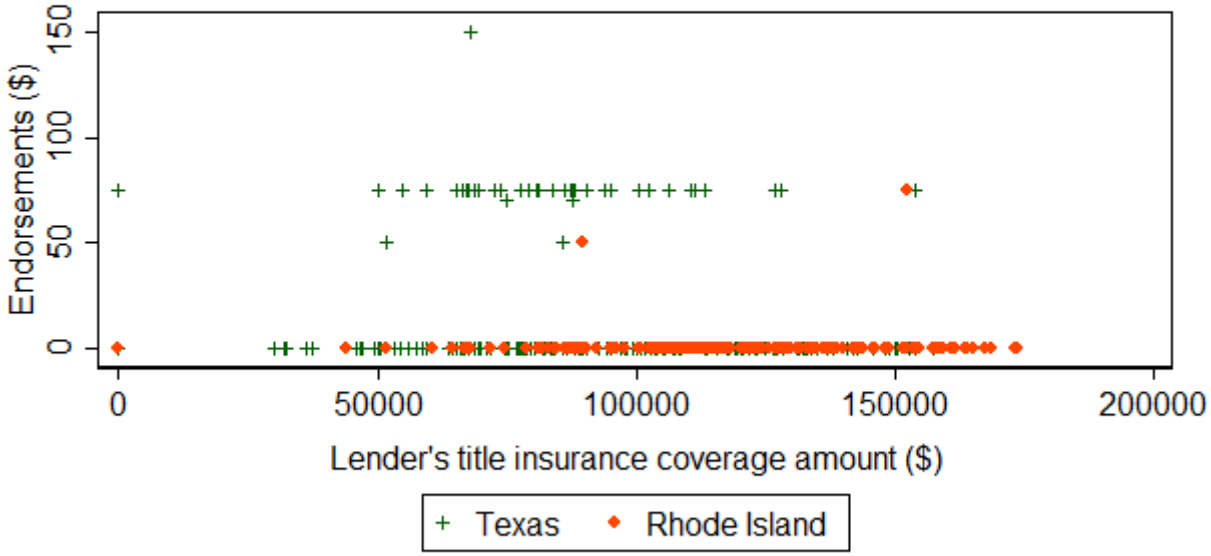
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.39 Comparison of Endorsements Between Texas and Pennsylvania



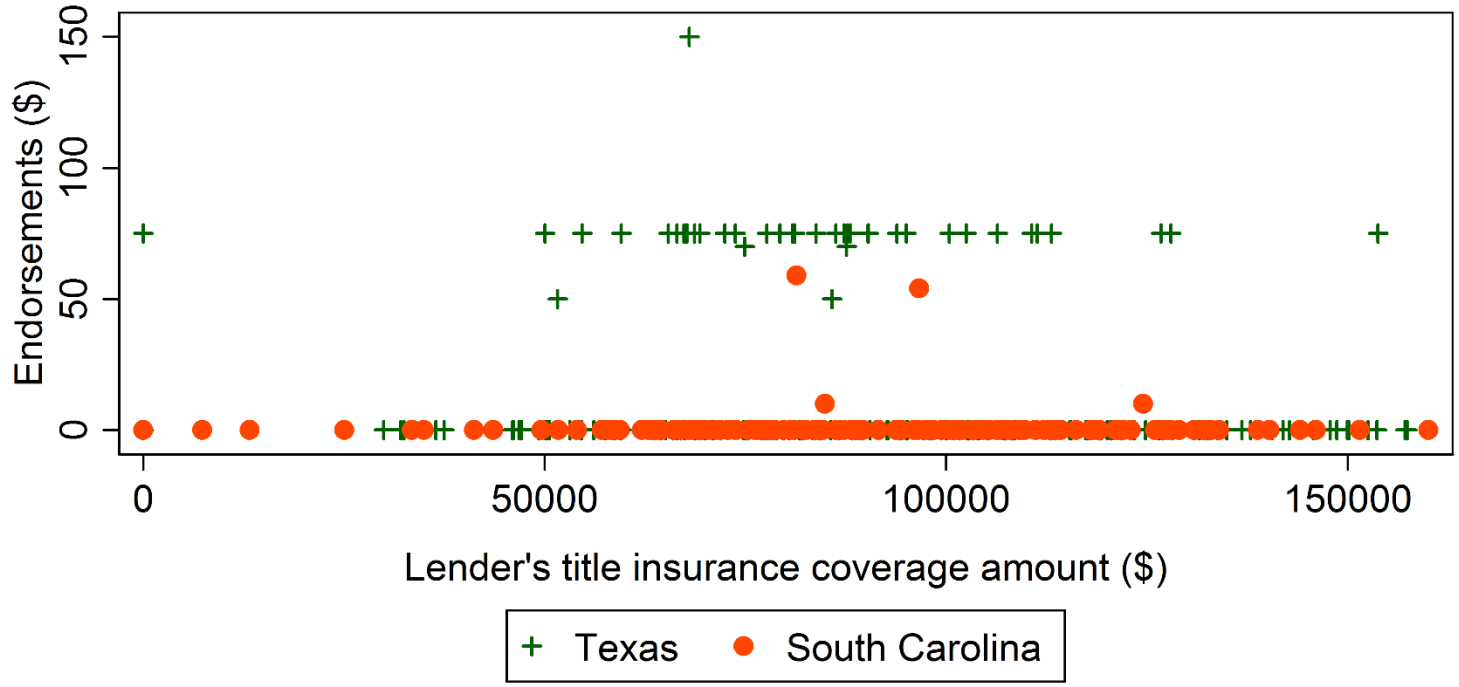
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.40 Comparison of Endorsements Between Texas and Rhode Island



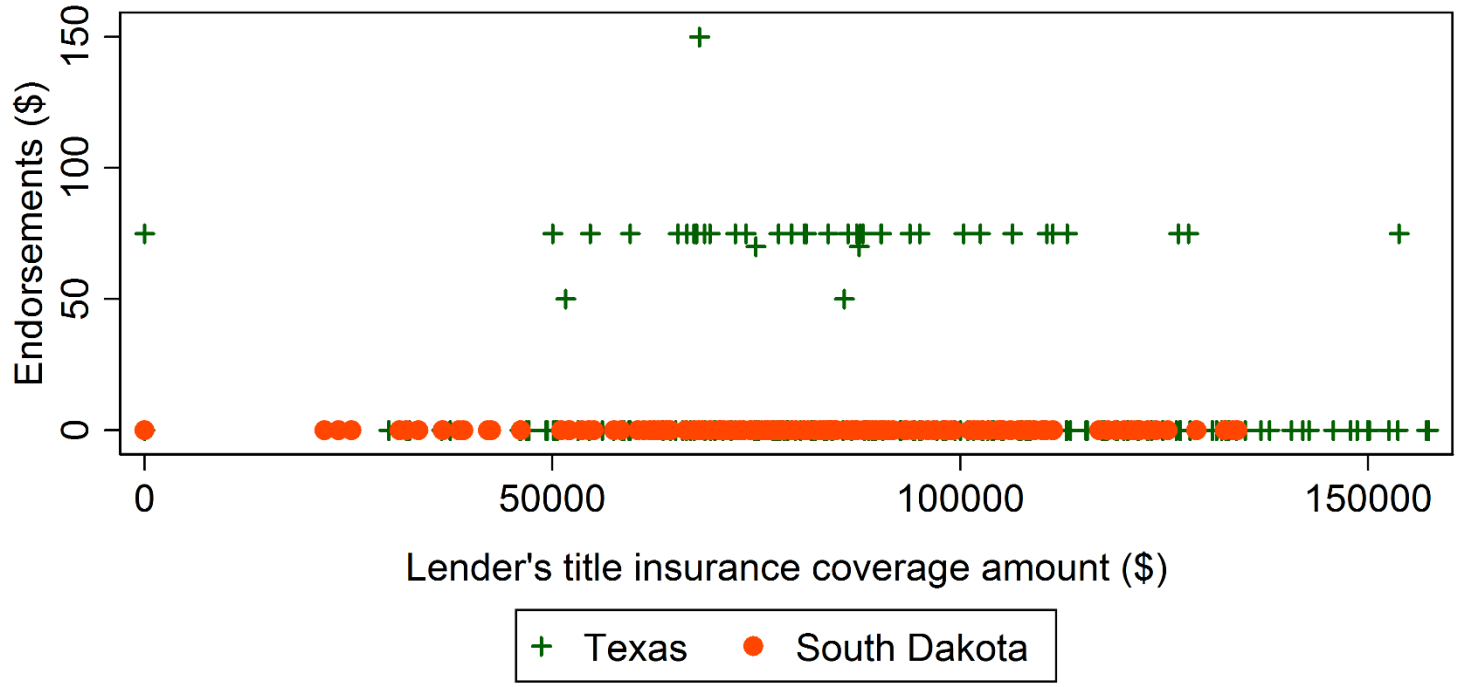
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.41 Comparison of Endorsements Between Texas and South Carolina



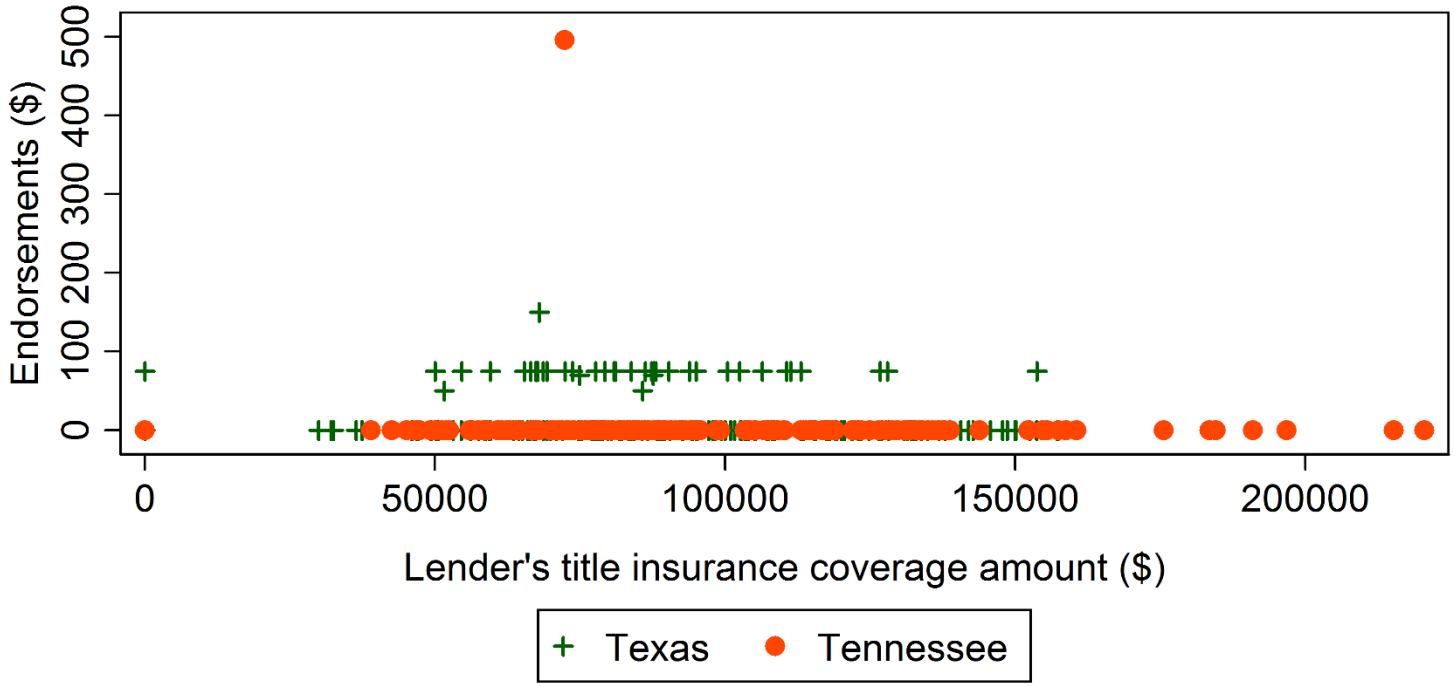
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.42 Comparison of Endorsements Between Texas and South Dakota



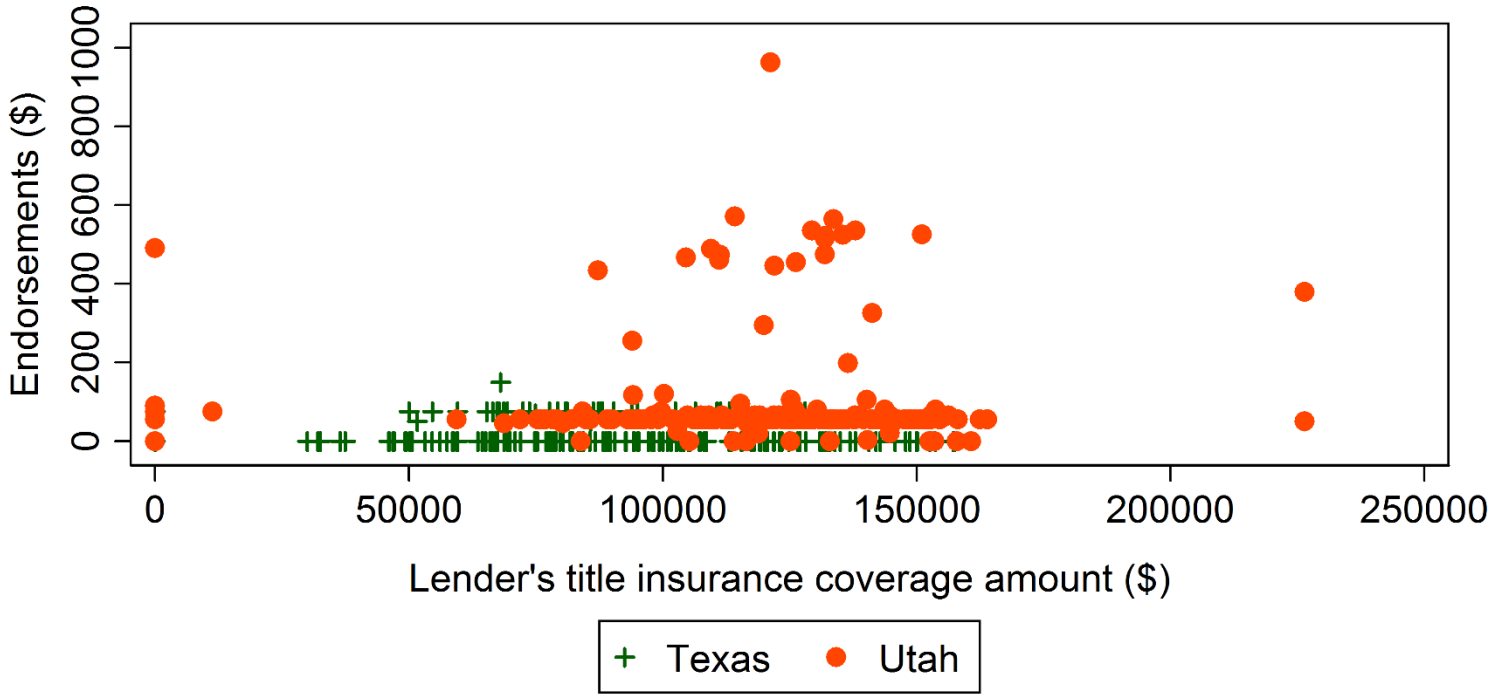
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.43 Comparison of Endorsements Between Texas and Tennessee



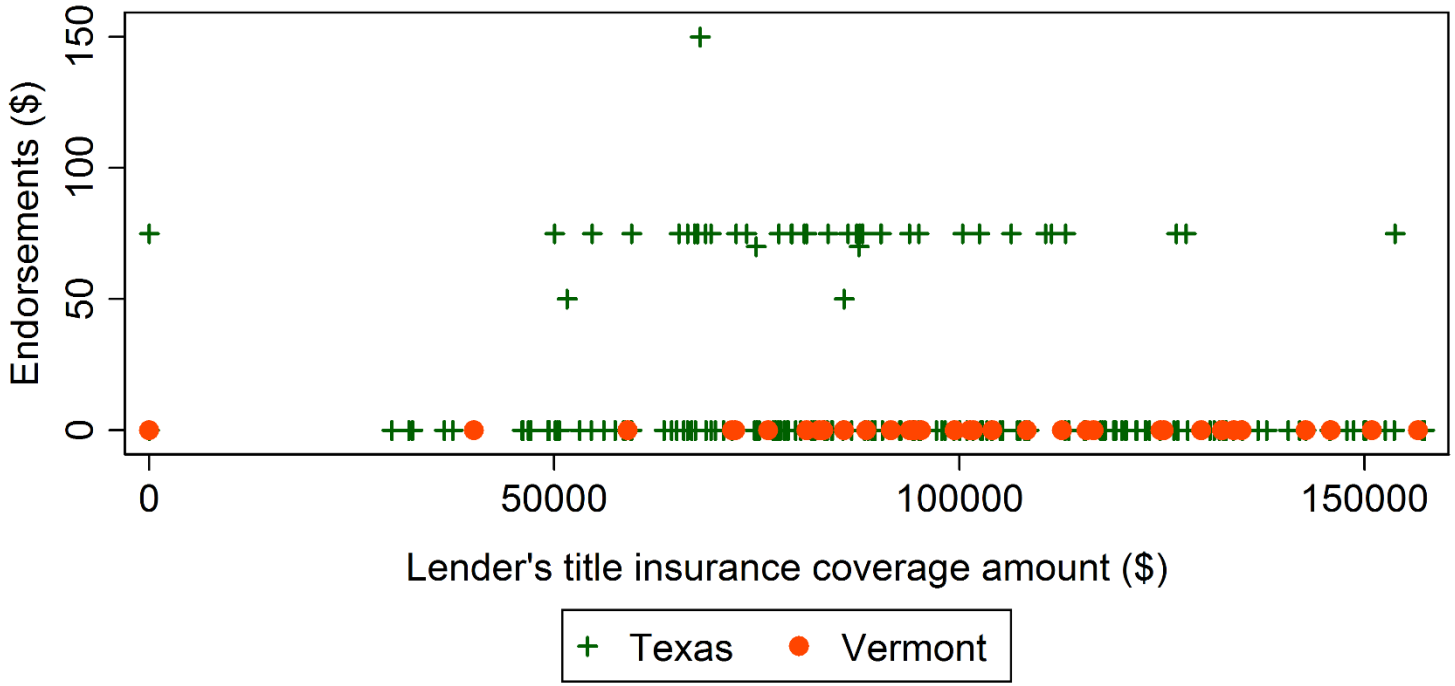
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.44 Comparison of Endorsements Between Texas and Utah



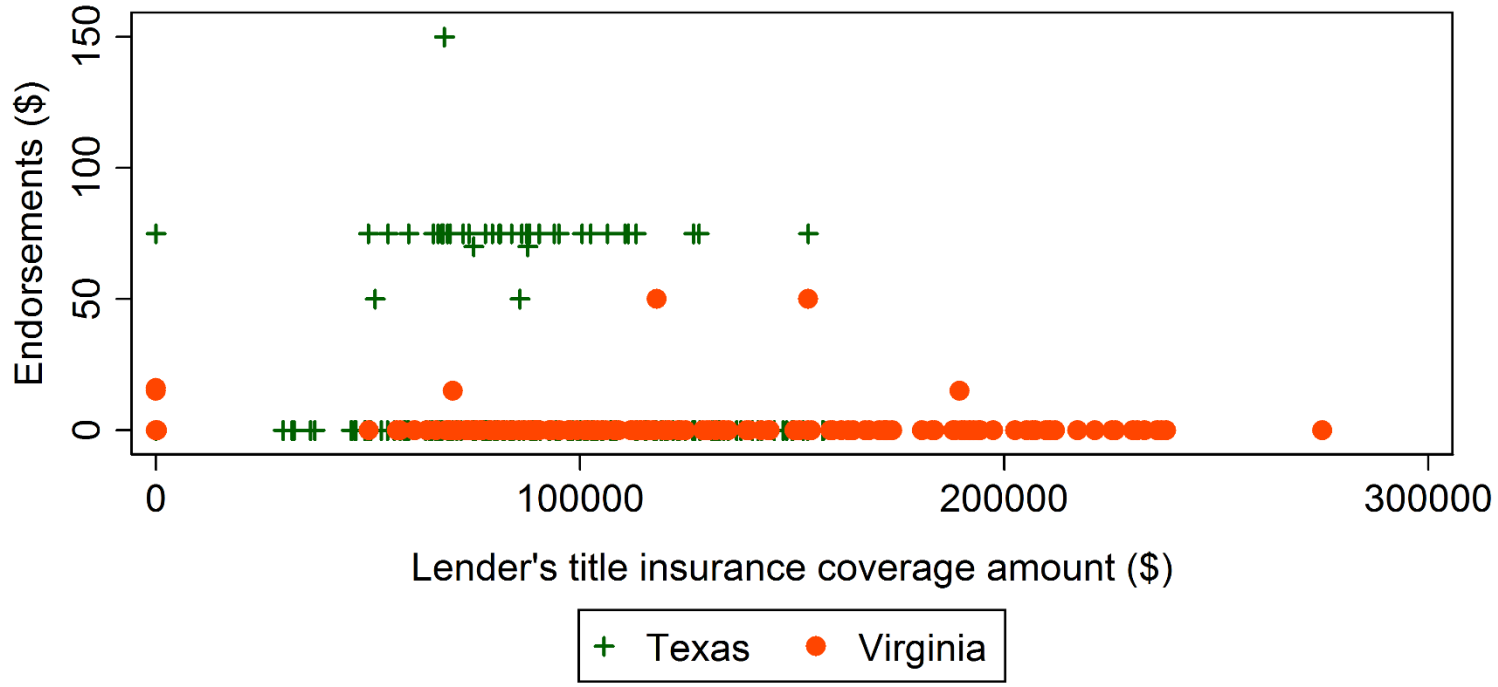
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.45 Comparison of Endorsements Between Texas and Vermont



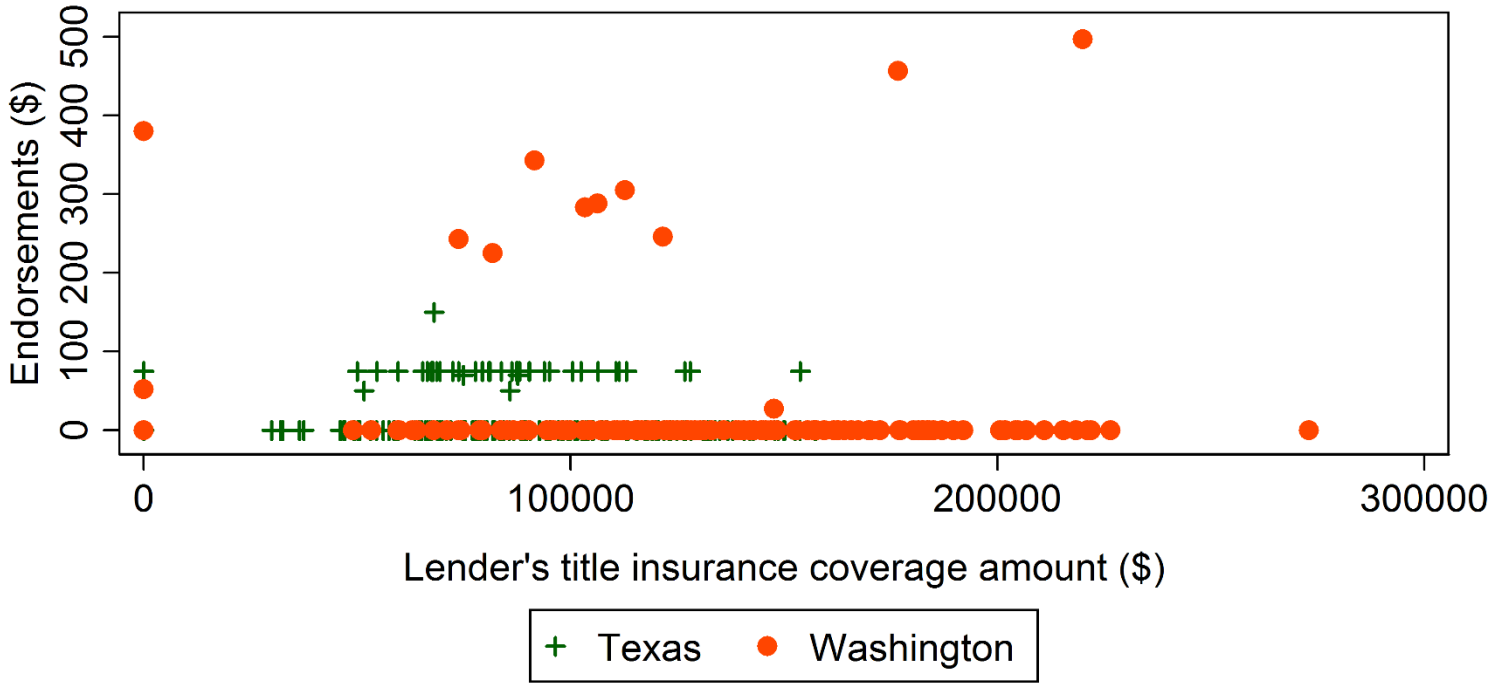
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.46 Comparison of Endorsements Between Texas and Virginia



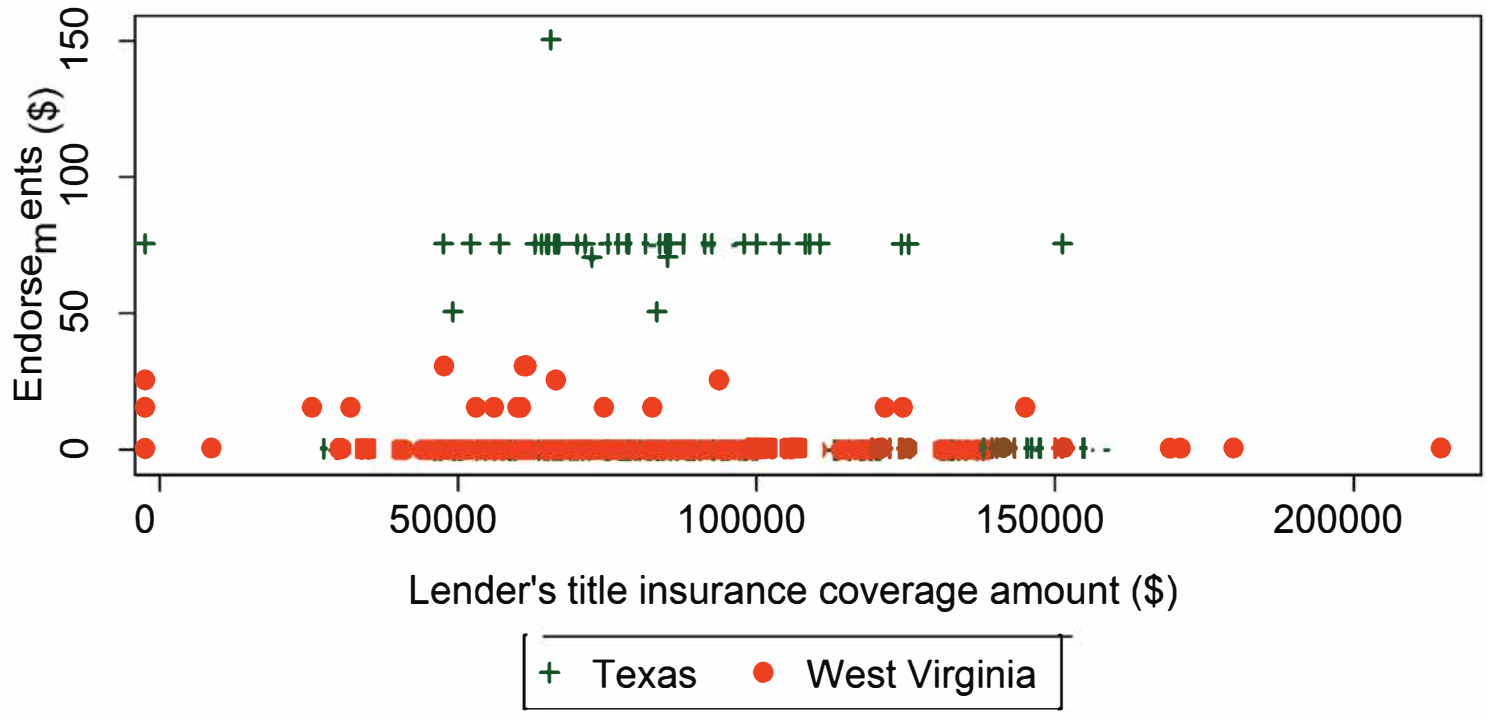
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.47 Comparison of Endorsements Between Texas and Washington



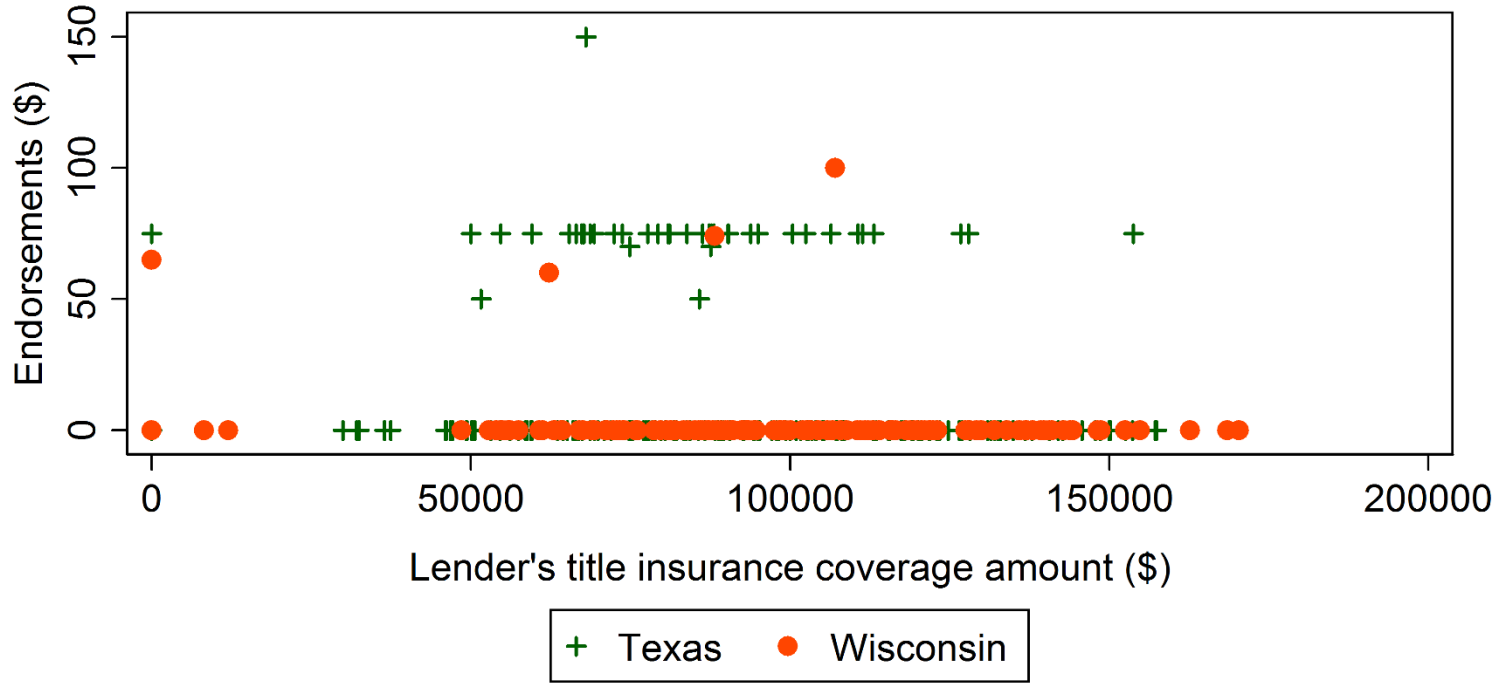
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.48 Comparison of Endorsements Between Texas and West Virginia



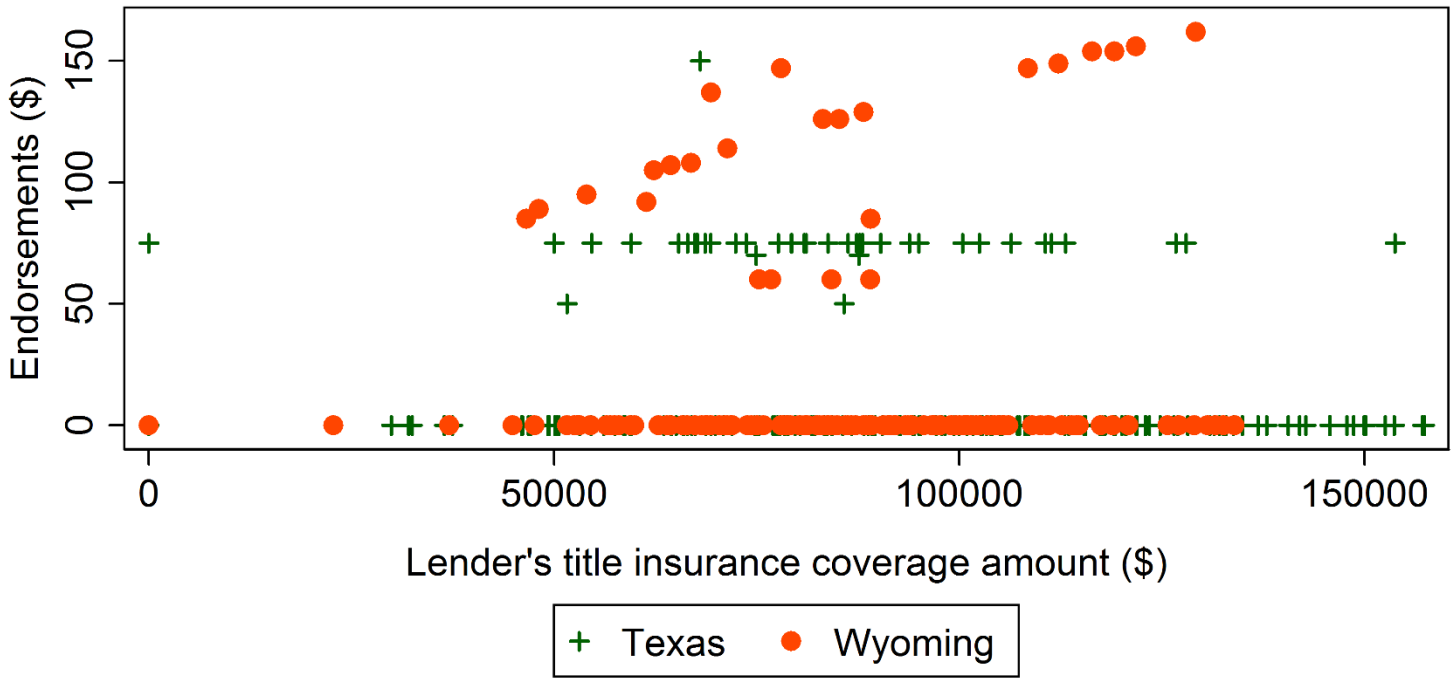
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.49 Comparison of Endorsements Between Texas and Wisconsin



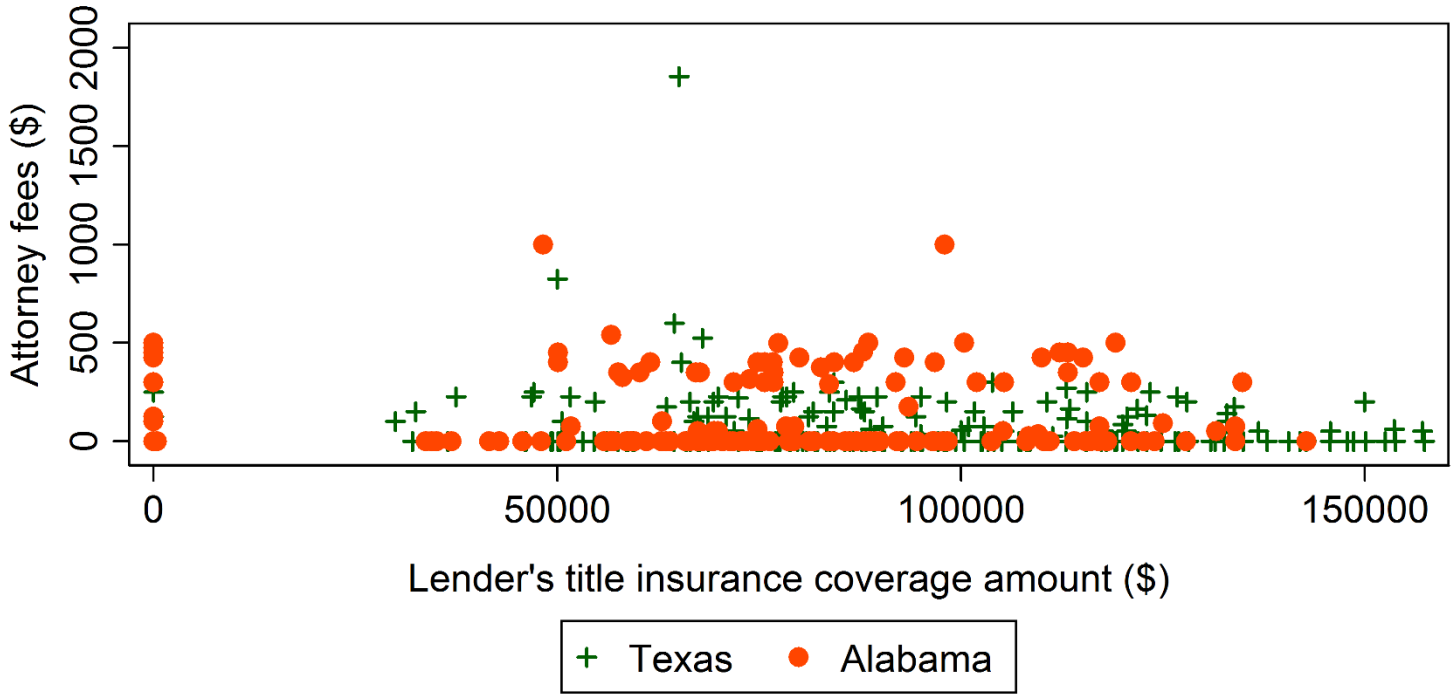
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.50 Comparison of Endorsements Between Texas and Wyoming



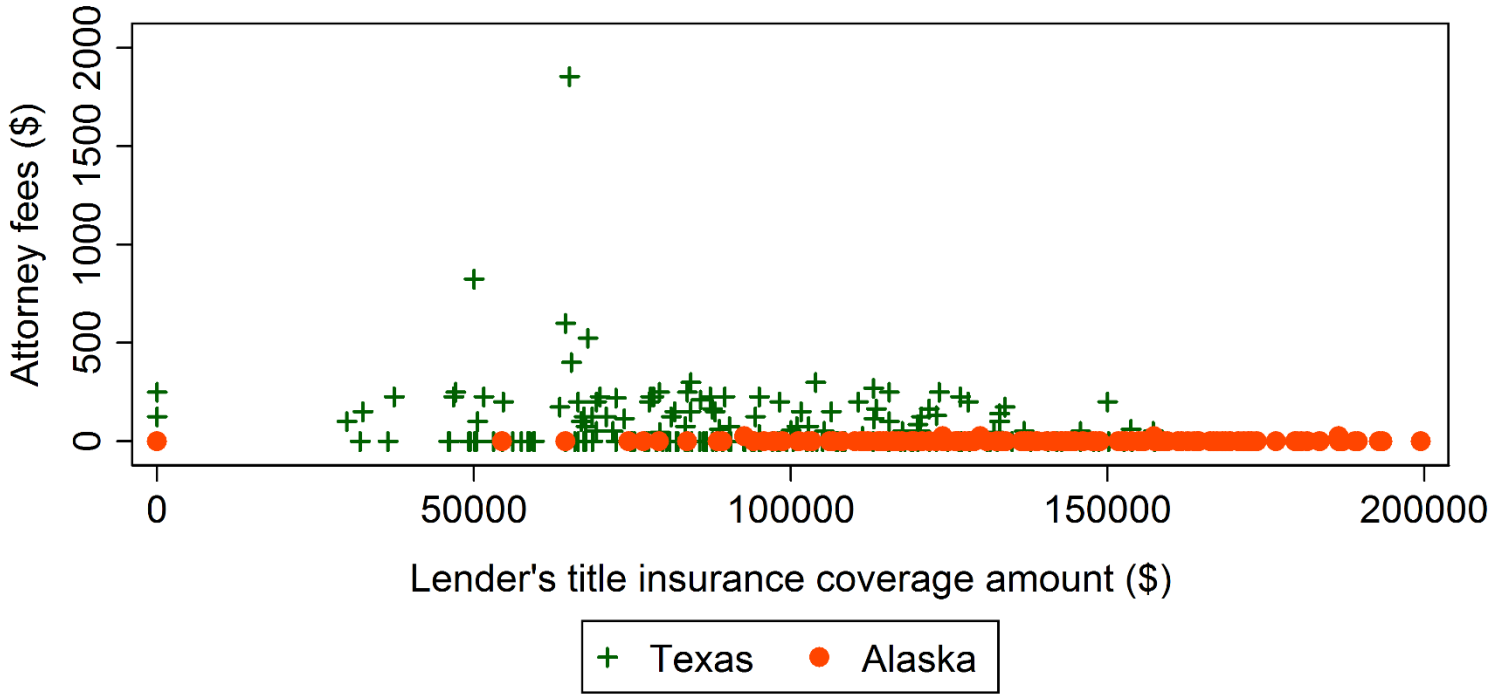
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.1 Comparison of Attorney Fees Between Texas and Alabama



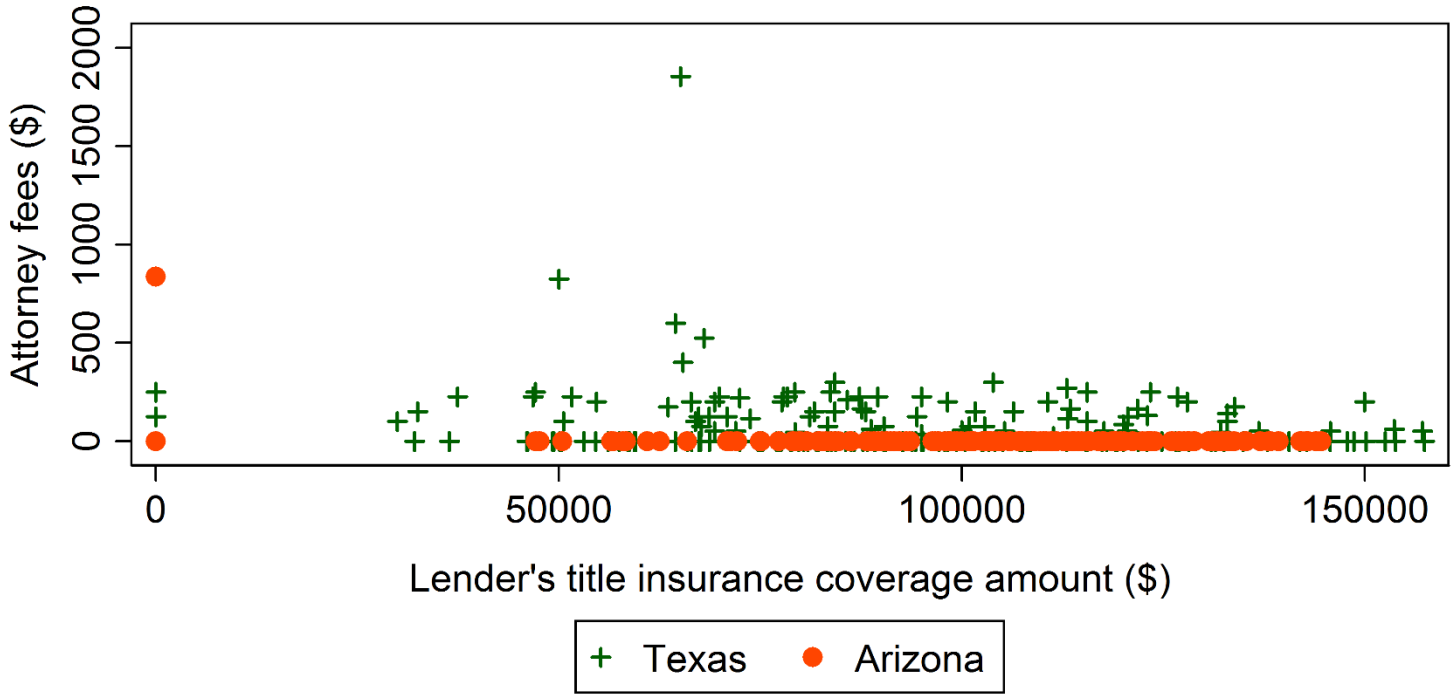
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.2 Comparison of Attorney Fees Between Texas and Alaska



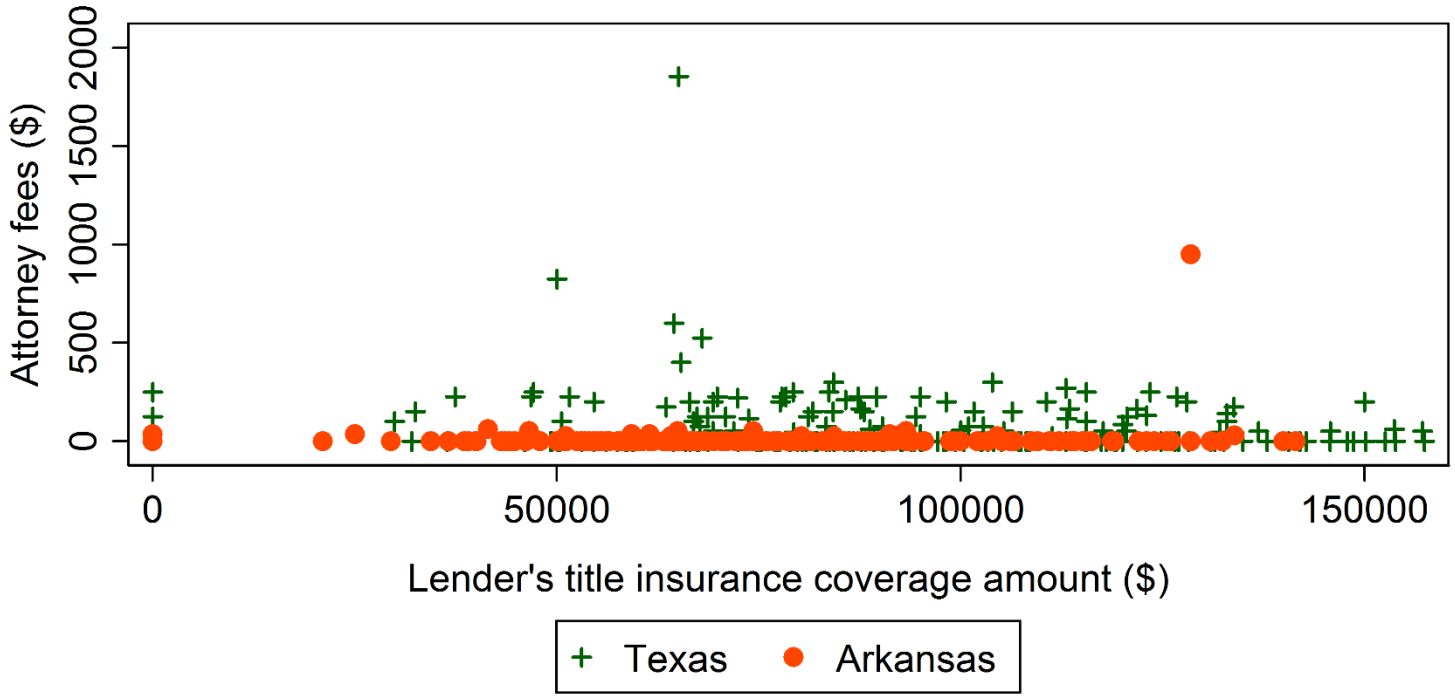
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.3 Comparison of Attorney Fees Between Texas and Arizona



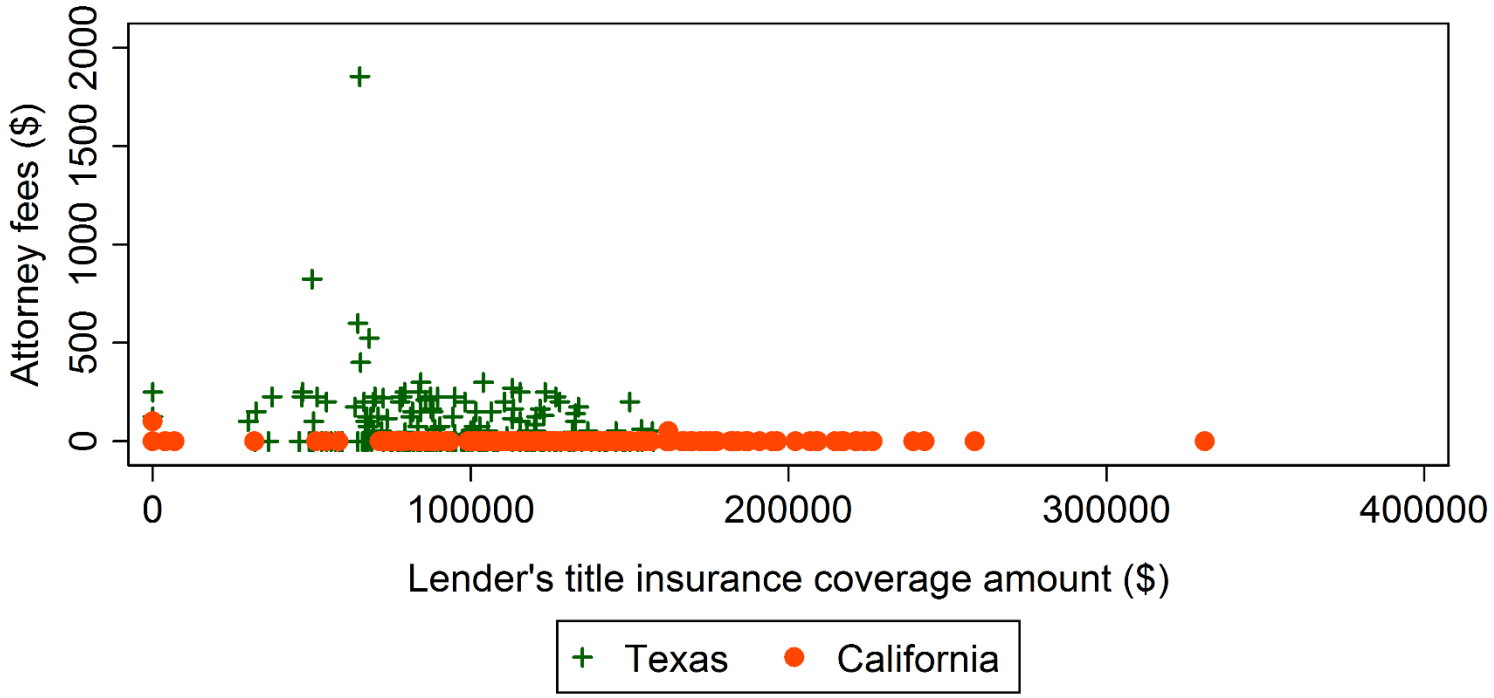
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.4 Comparison of Attorney Fees Between Texas and Arkansas



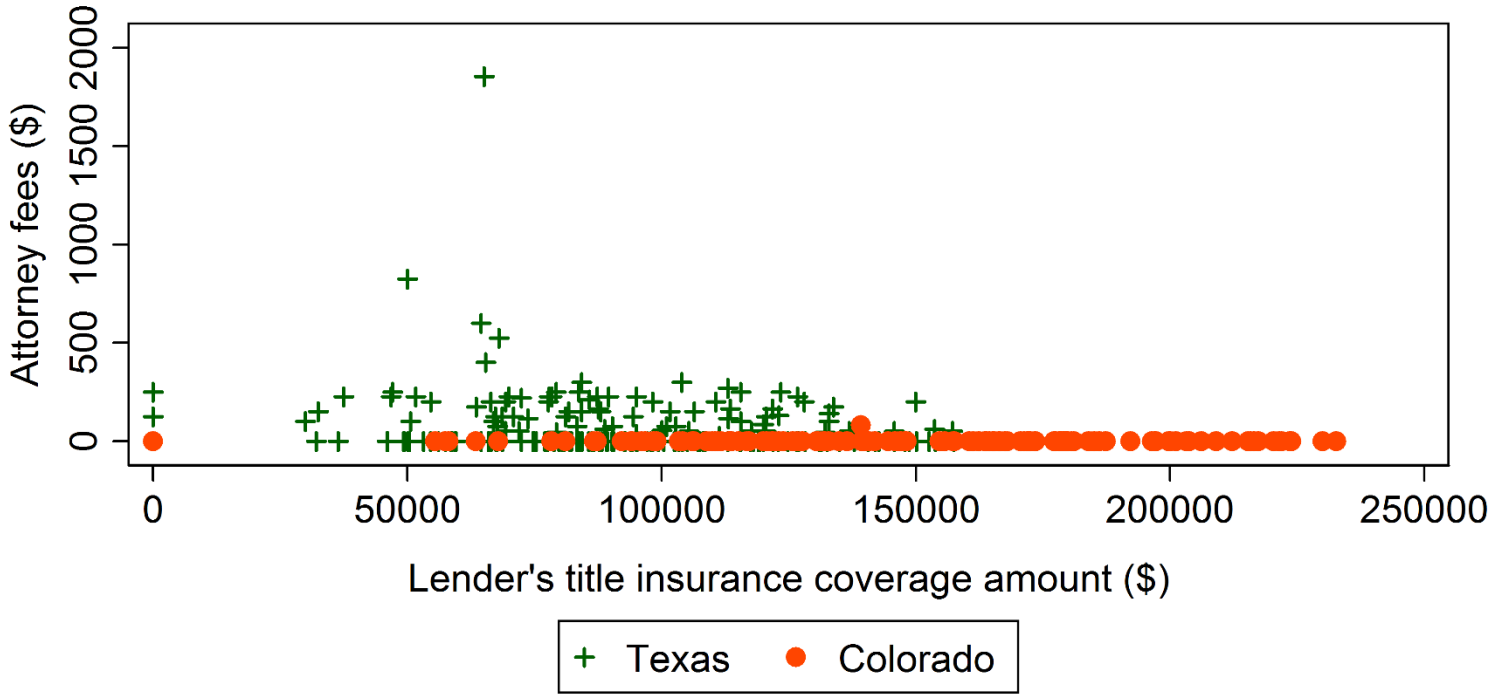
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.5 Comparison of Attorney Fees Between Texas and California



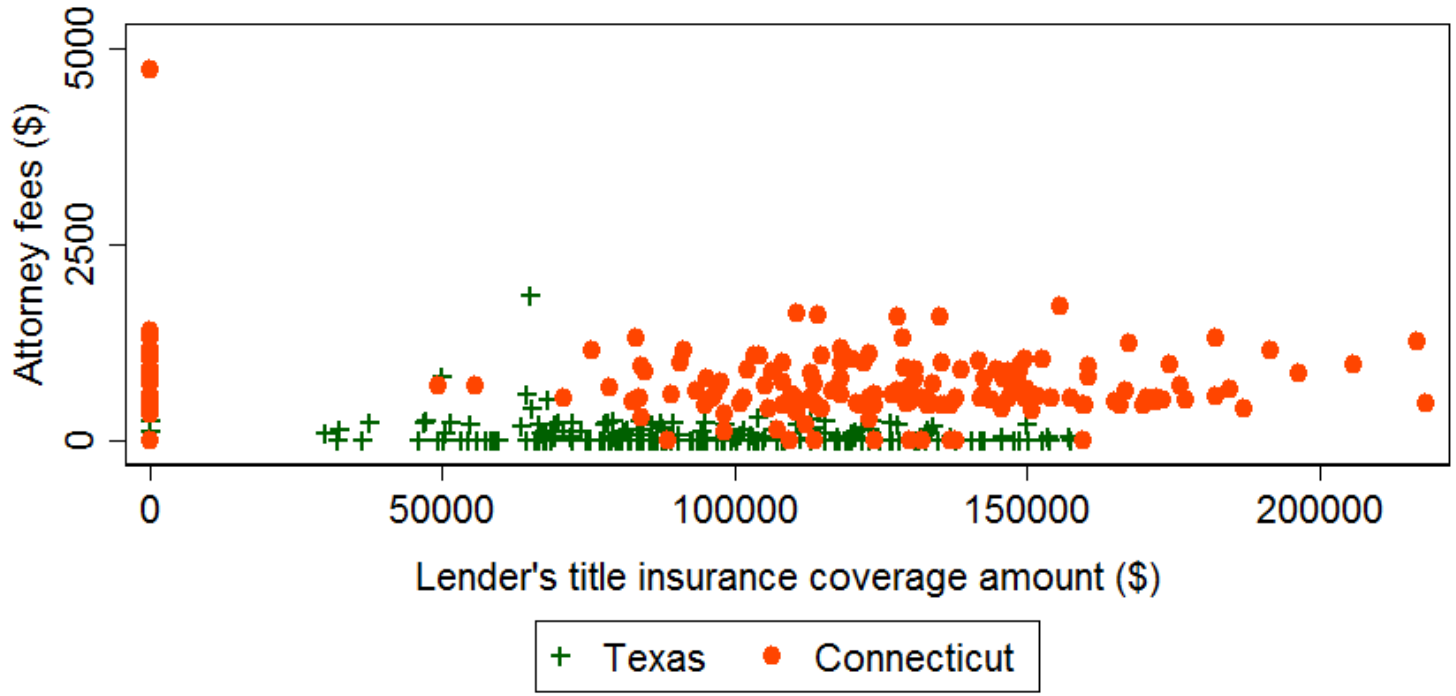
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.6 Comparison of Attorney Fees Between Texas and Colorado



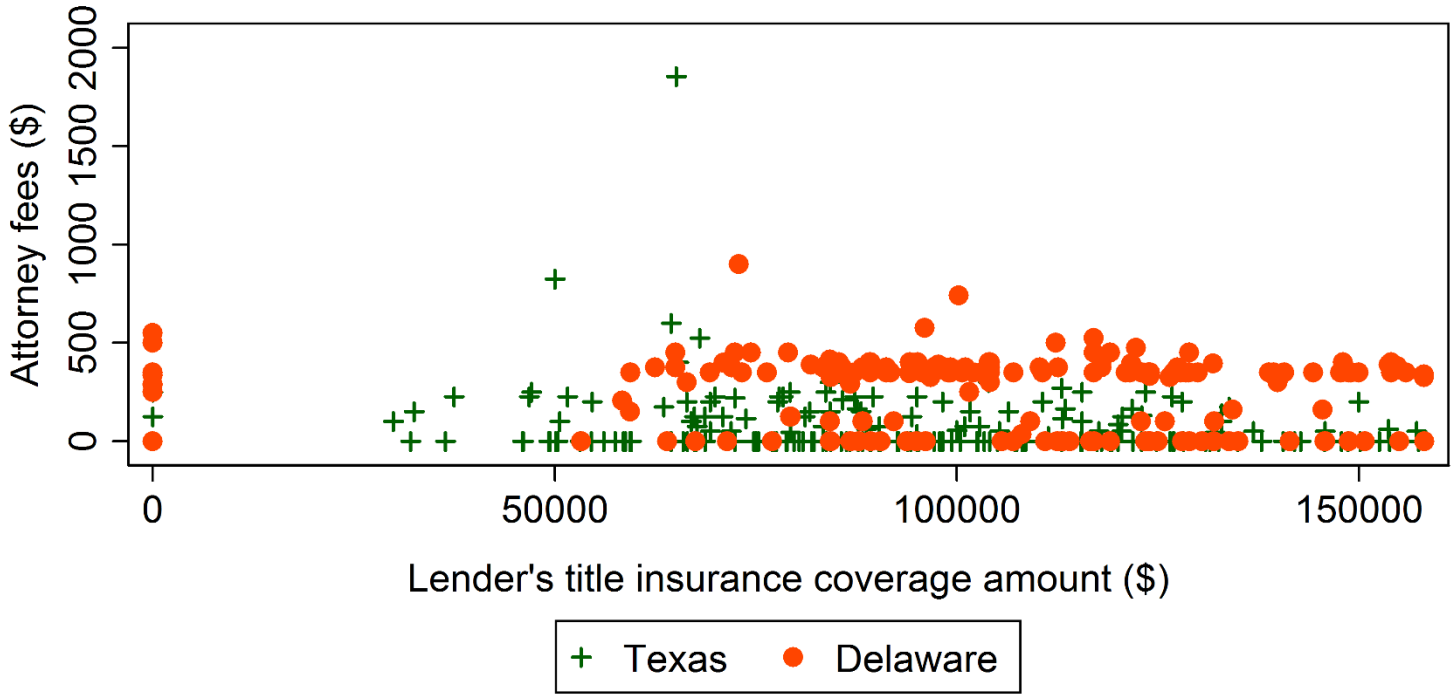
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.7 Comparison of Attorney Fees Between Texas and Connecticut



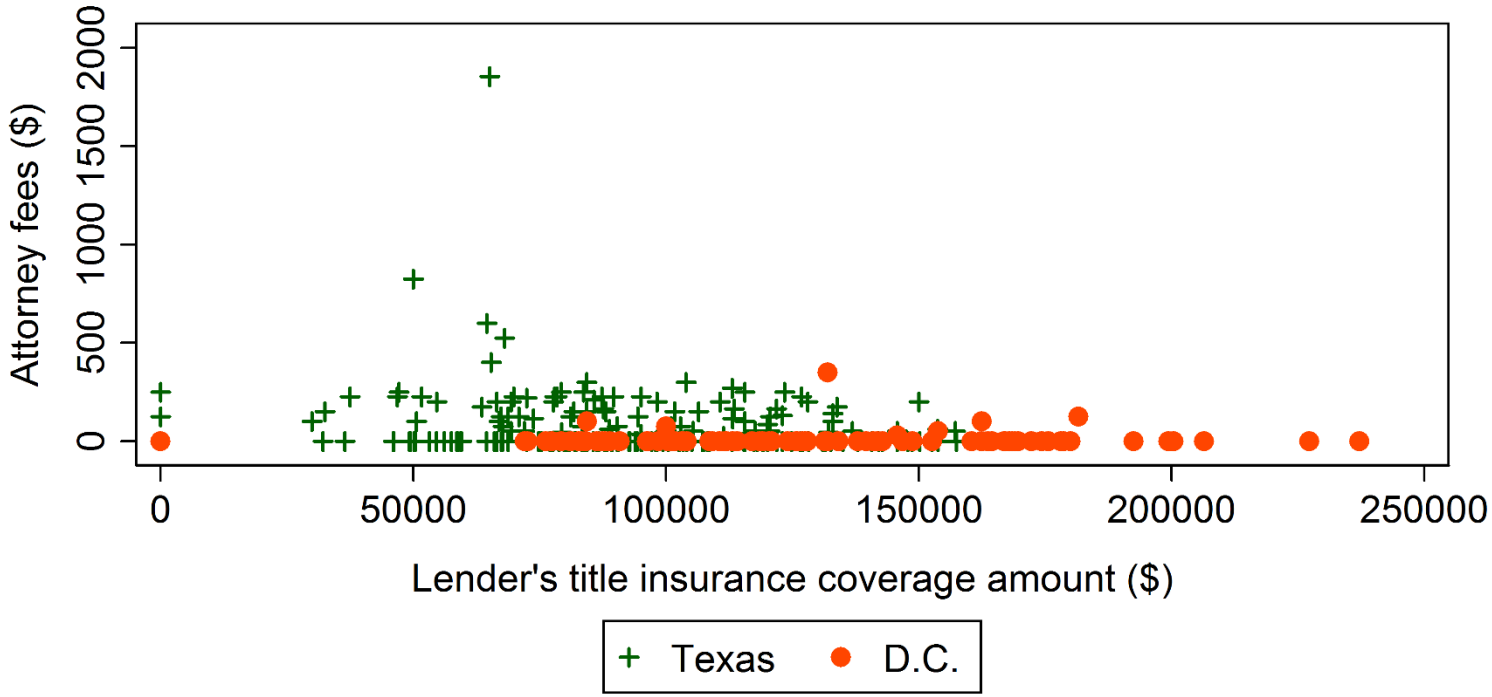
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.8 Comparison of Attorney Fees Between Texas and Delaware



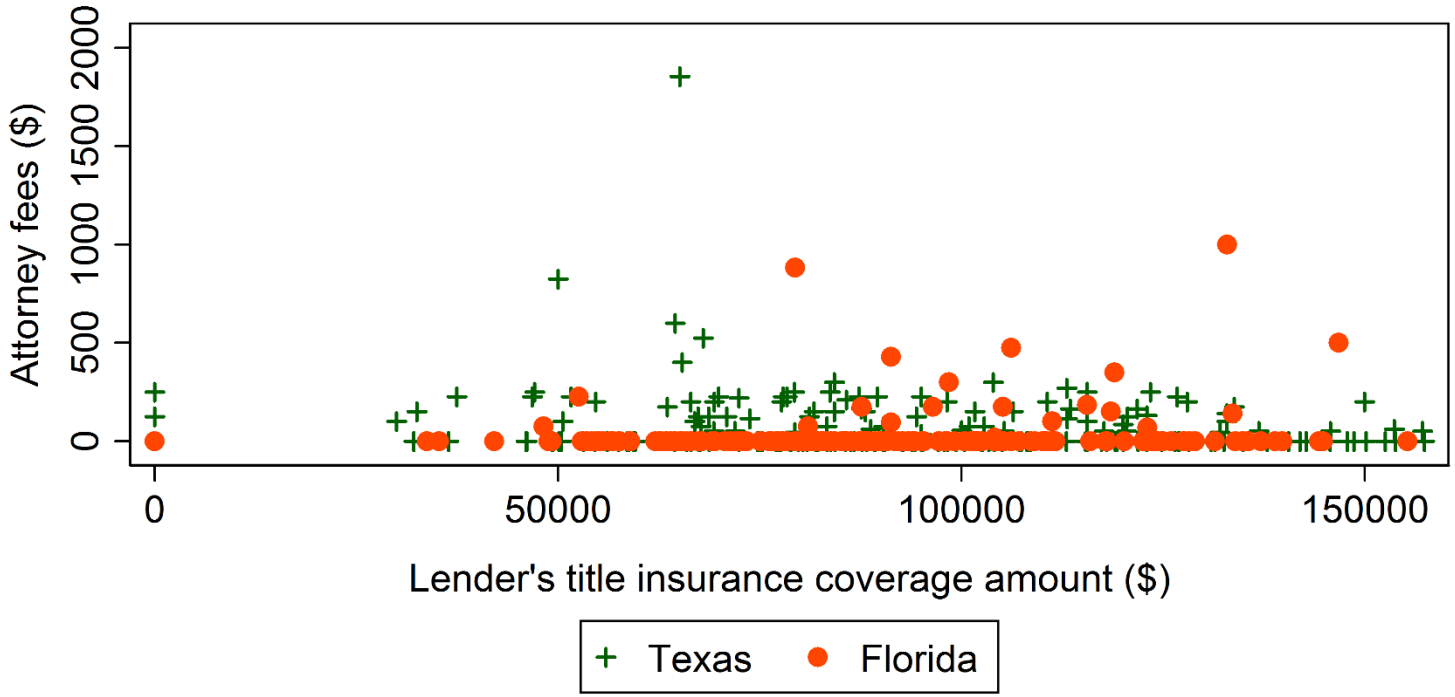
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.9 Comparison of Attorney Fees Between Texas and D.C.



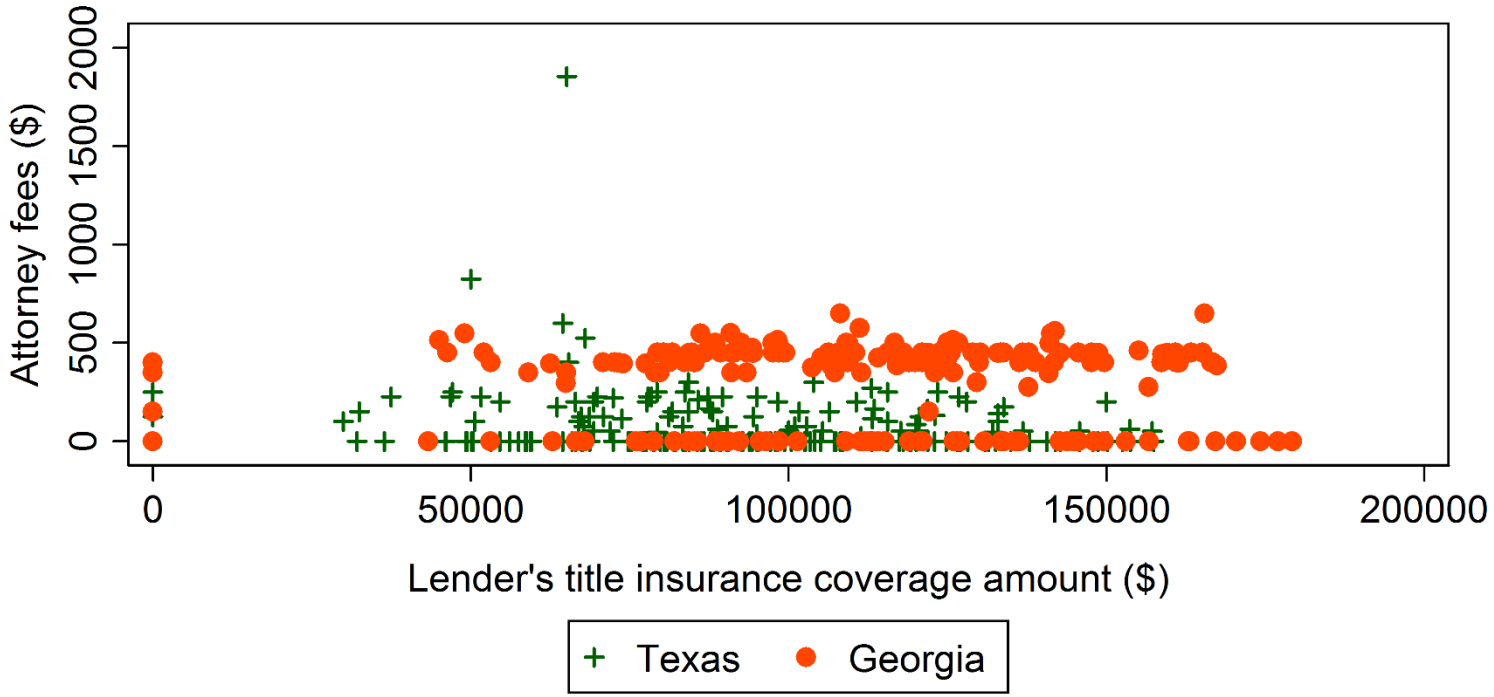
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.10 Comparison of Attorney Fees Between Texas and Florida



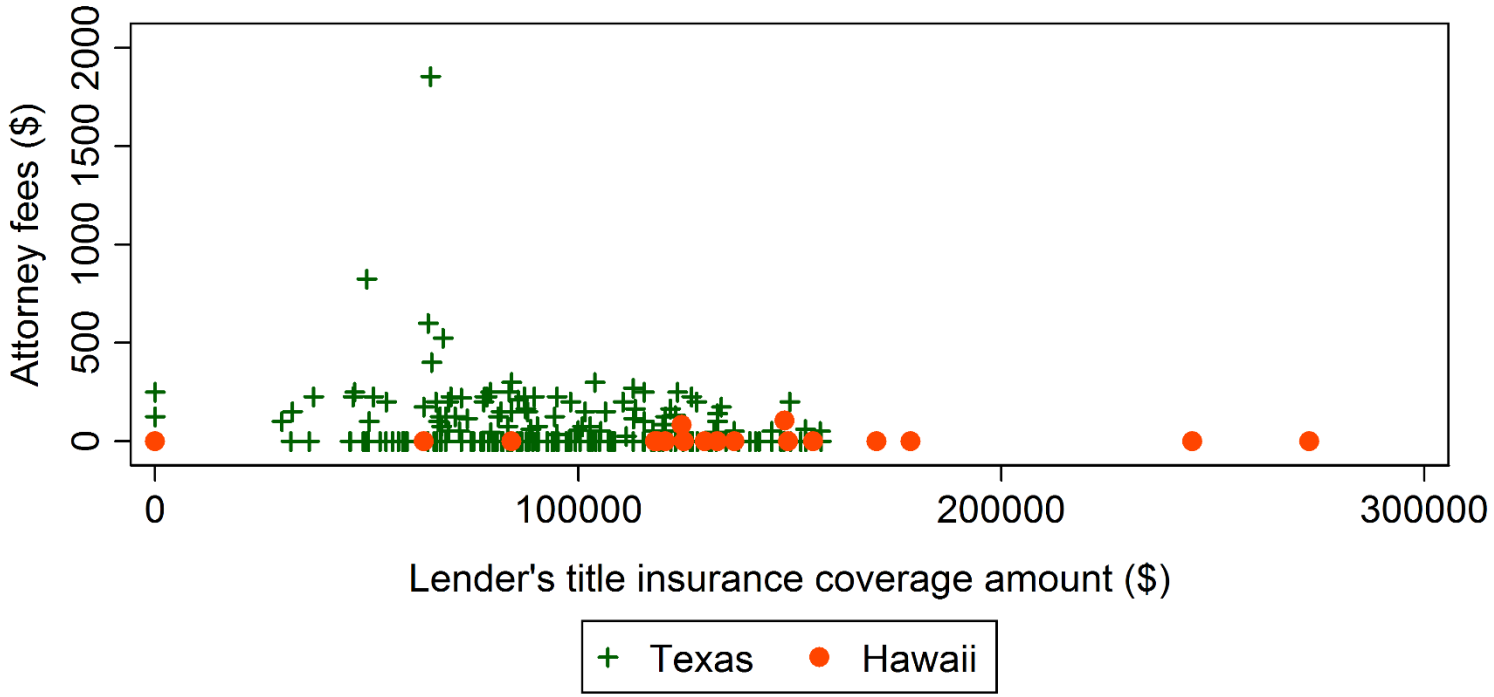
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.11 Comparison of Attorney Fees Between Texas and Georgia



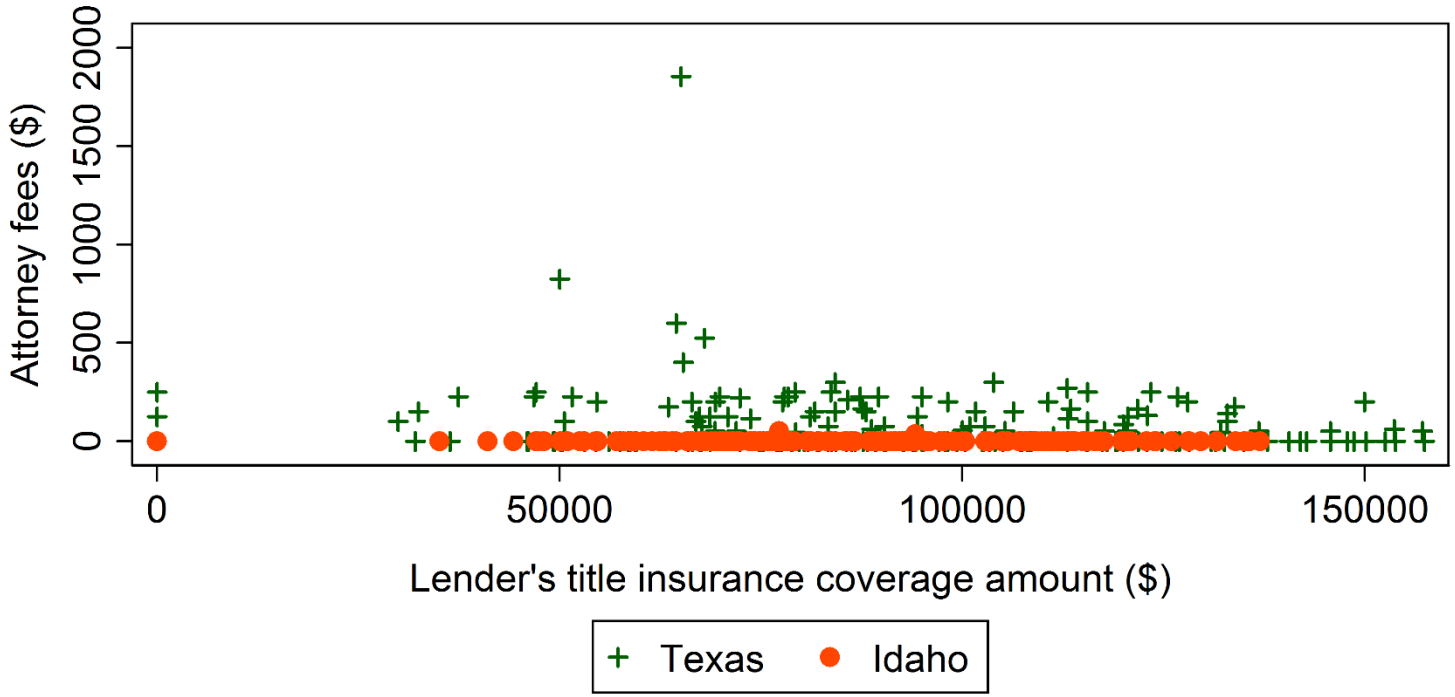
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.12 Comparison of Attorney Fees Between Texas and Hawaii



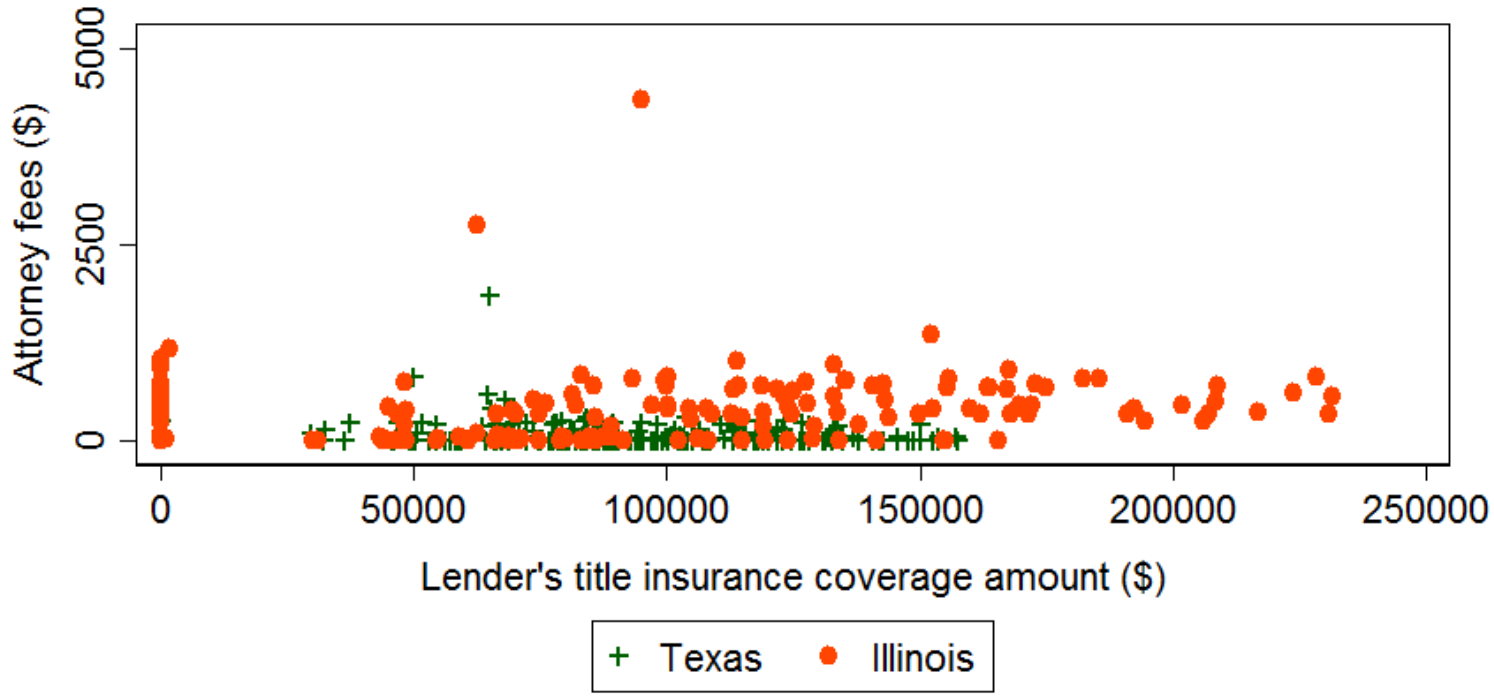
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.13 Comparison of Attorney Fees Between Texas and Idaho



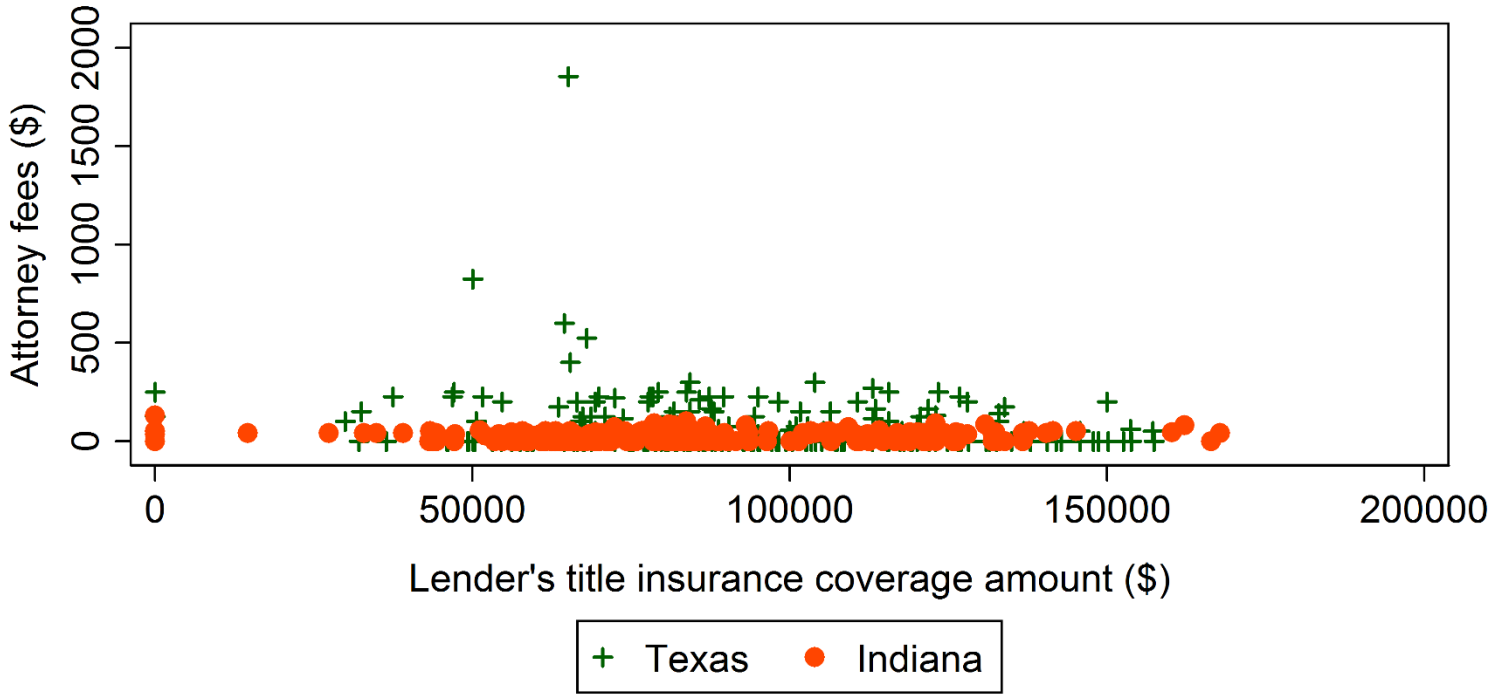
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.14 Comparison of Attorney Fees Between Texas and Illinois



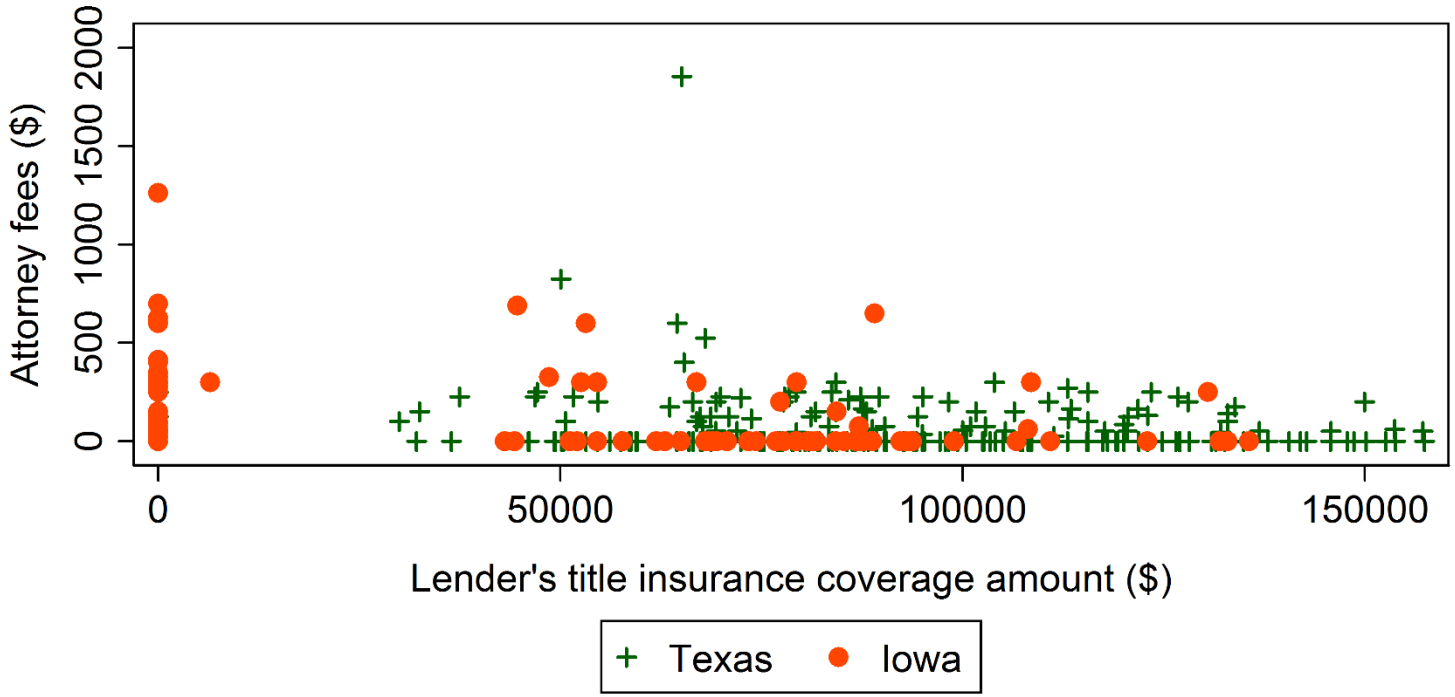
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.15 Comparison of Attorney Fees Between Texas and Indiana



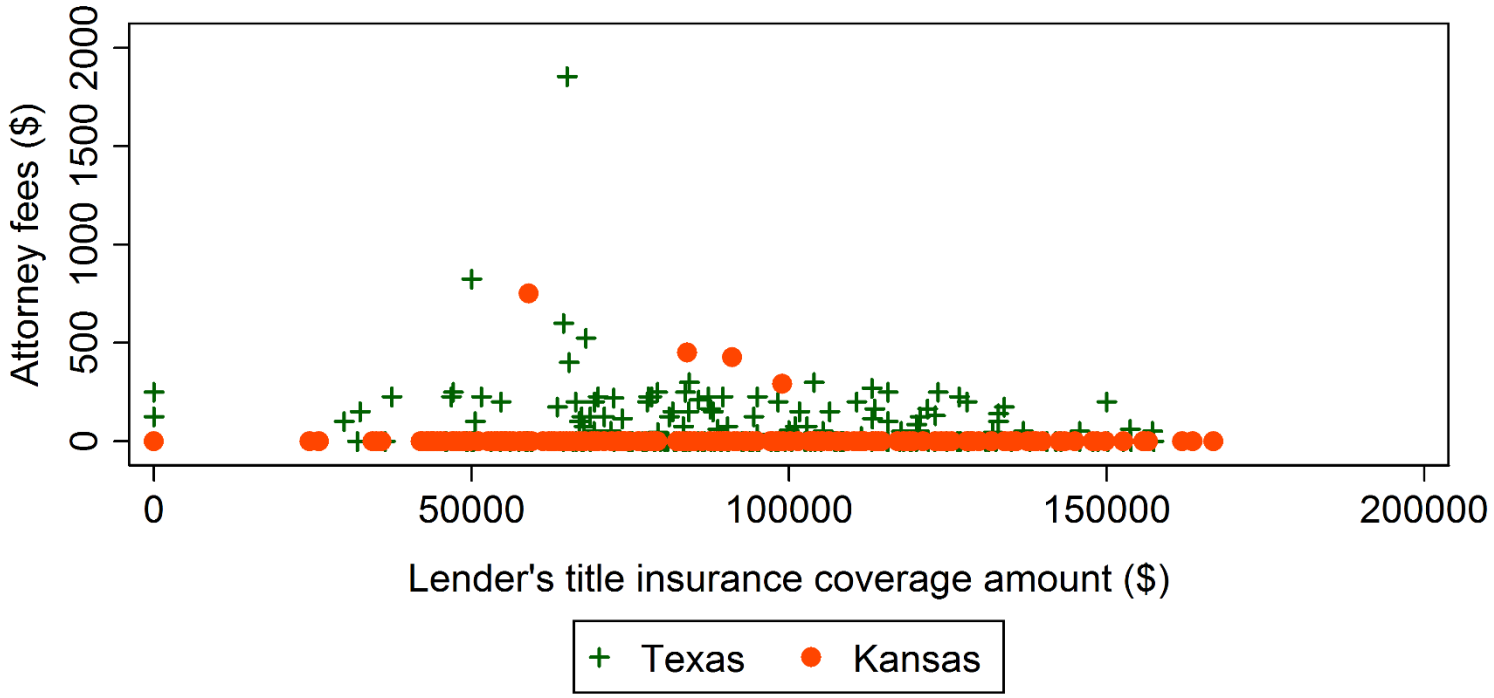
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.16 Comparison of Attorney Fees Between Texas and Iowa



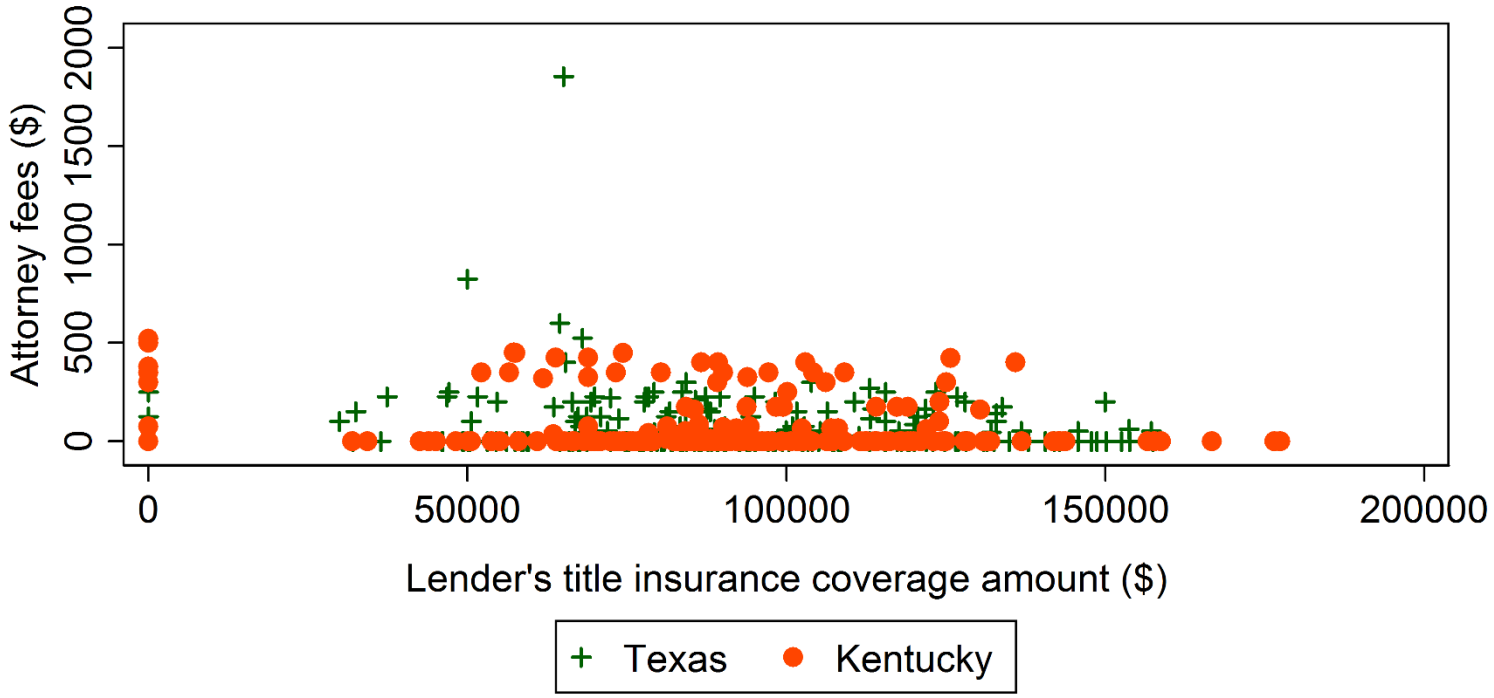
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.17 Comparison of Attorney Fees Between Texas and Kansas



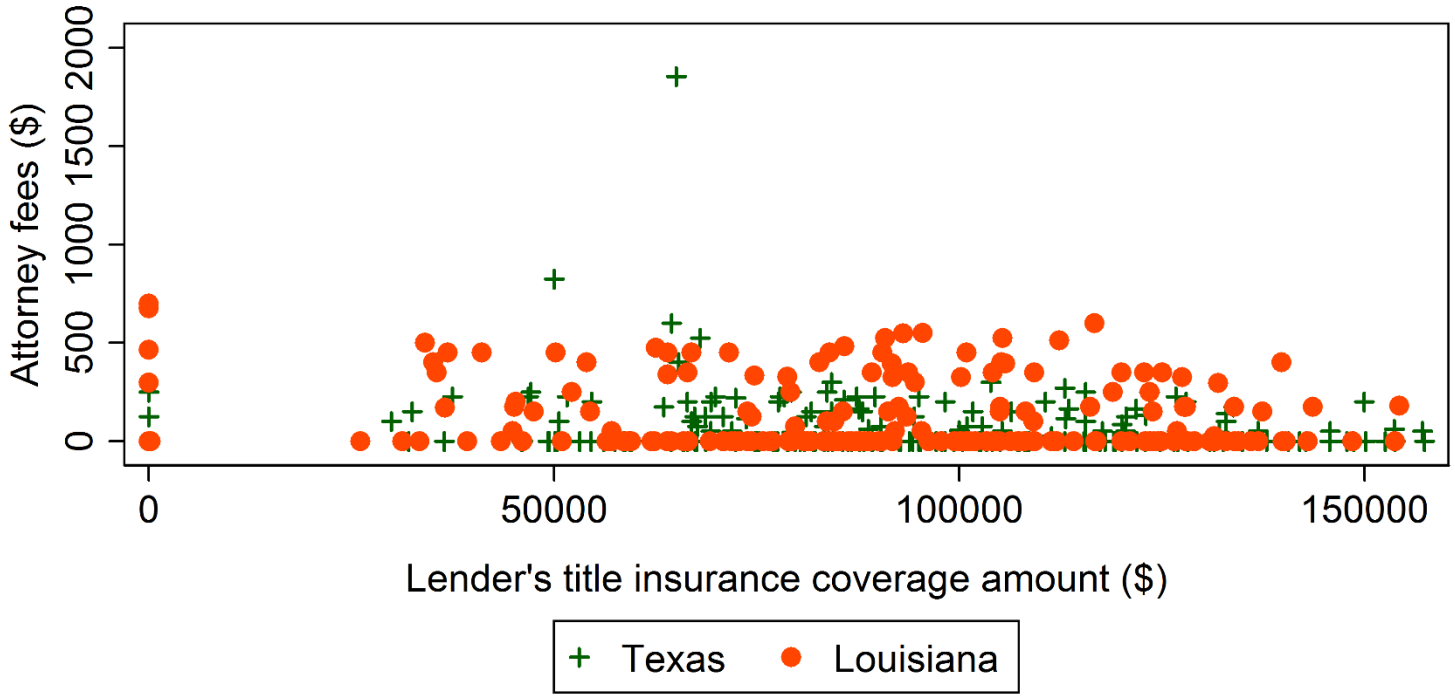
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.18 Comparison of Attorney Fees Between Texas and Kentucky



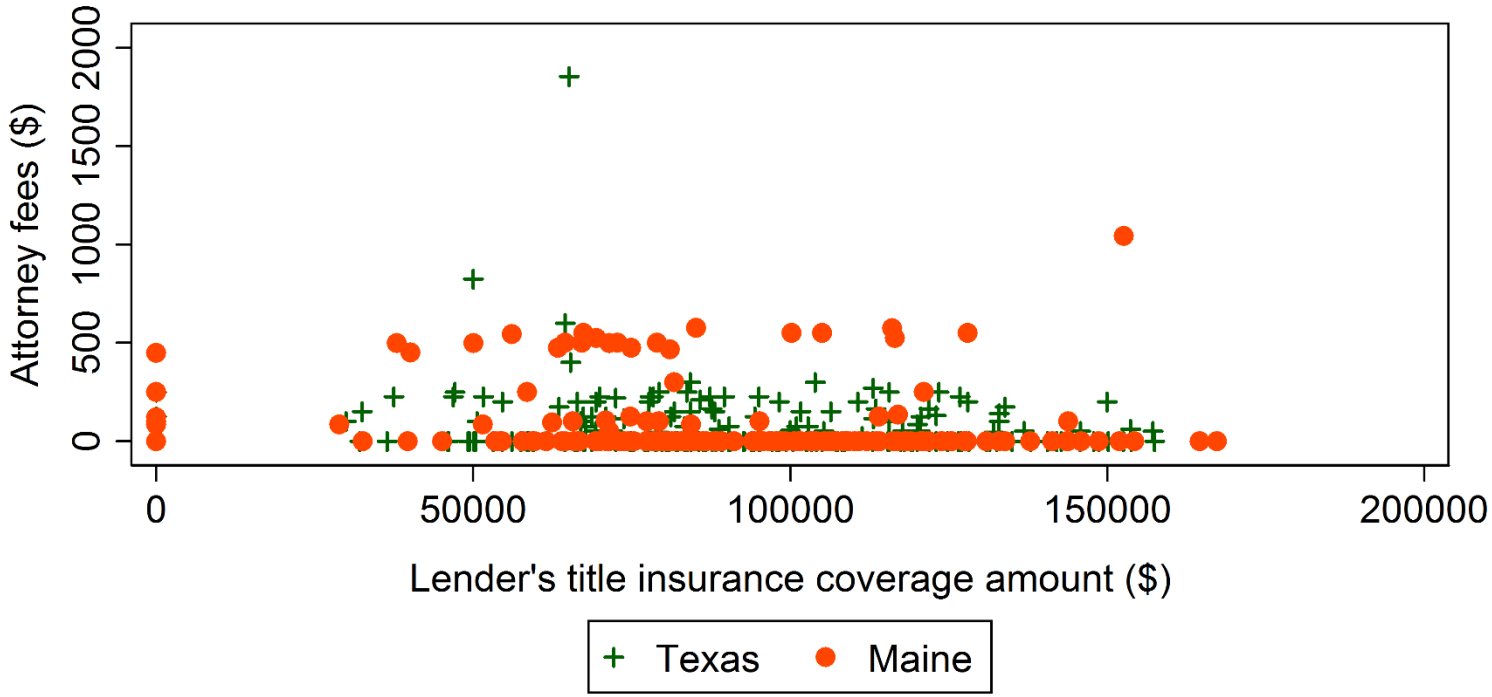
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.19 Comparison of Attorney Fees Between Texas and Louisiana



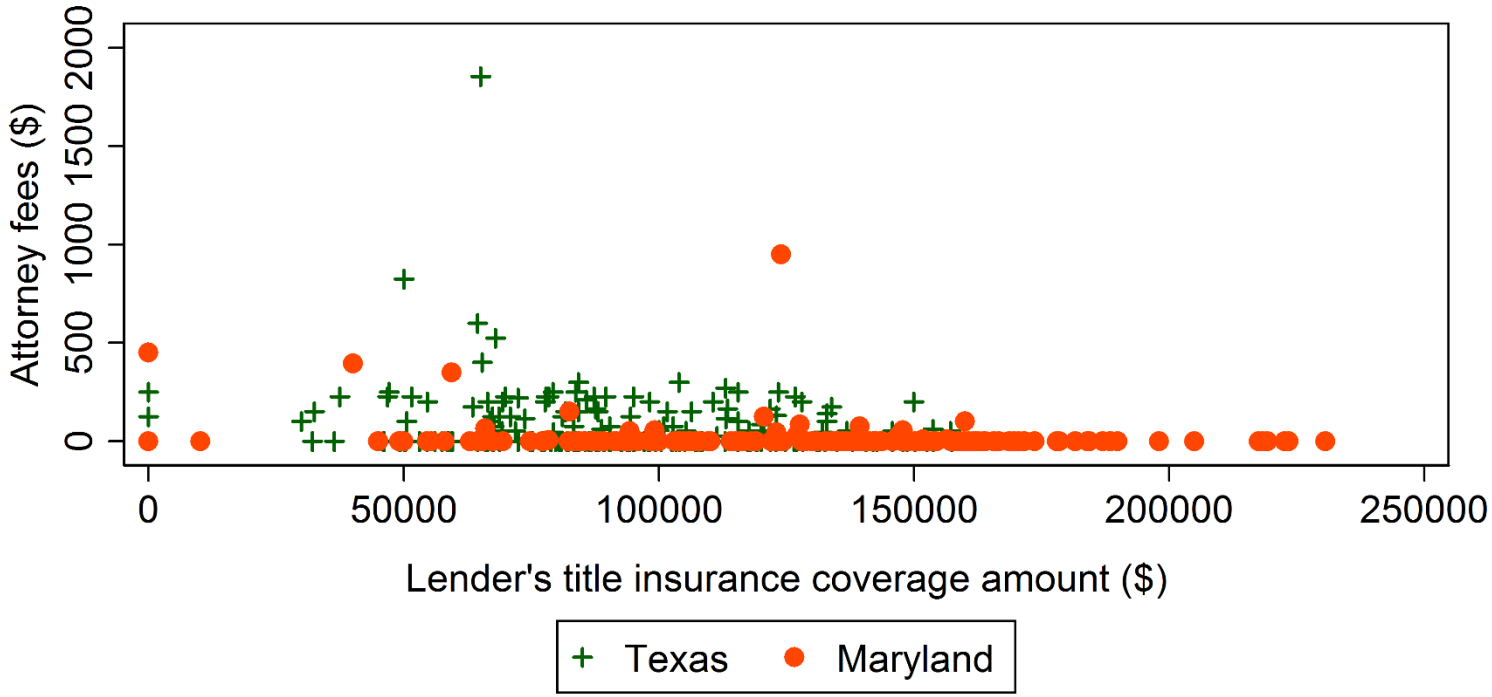
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.20 Comparison of Attorney Fees Between Texas and Maine



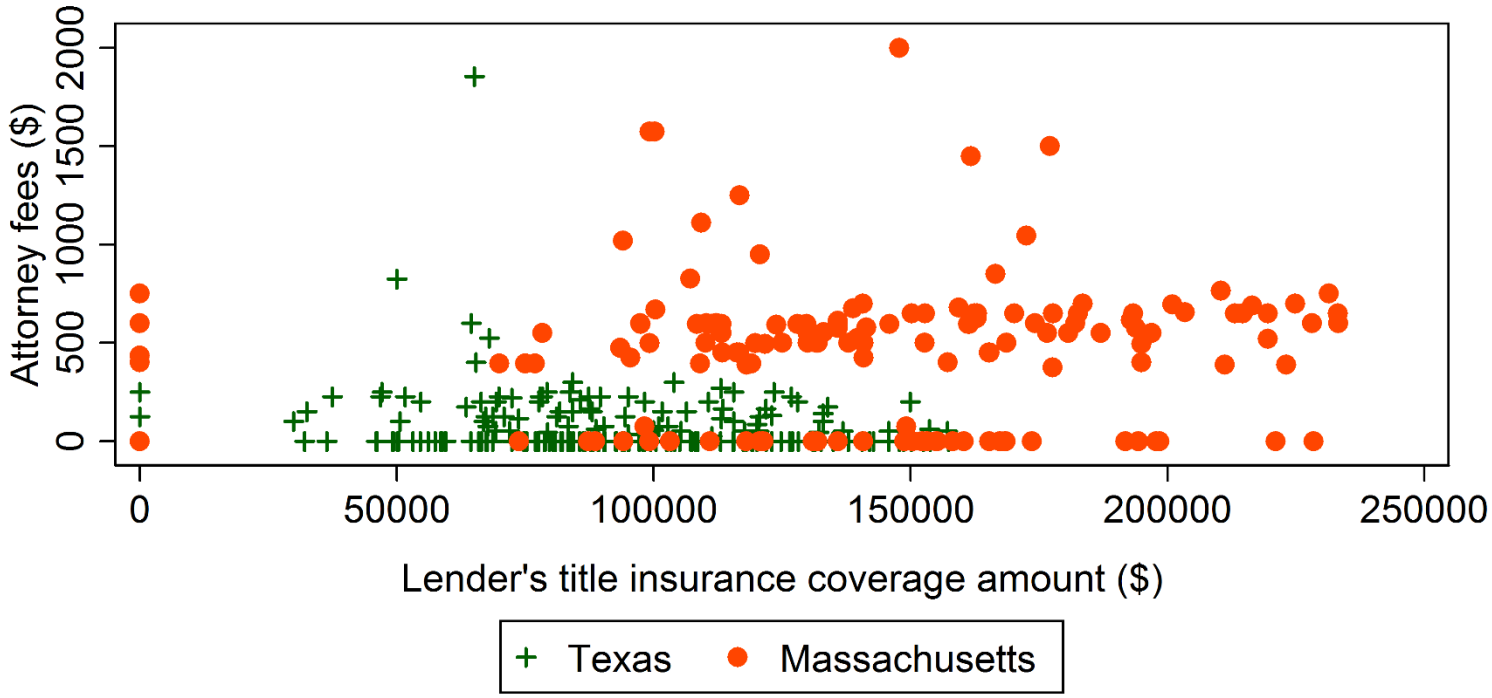
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.21 Comparison of Attorney Fees Between Texas and Maryland



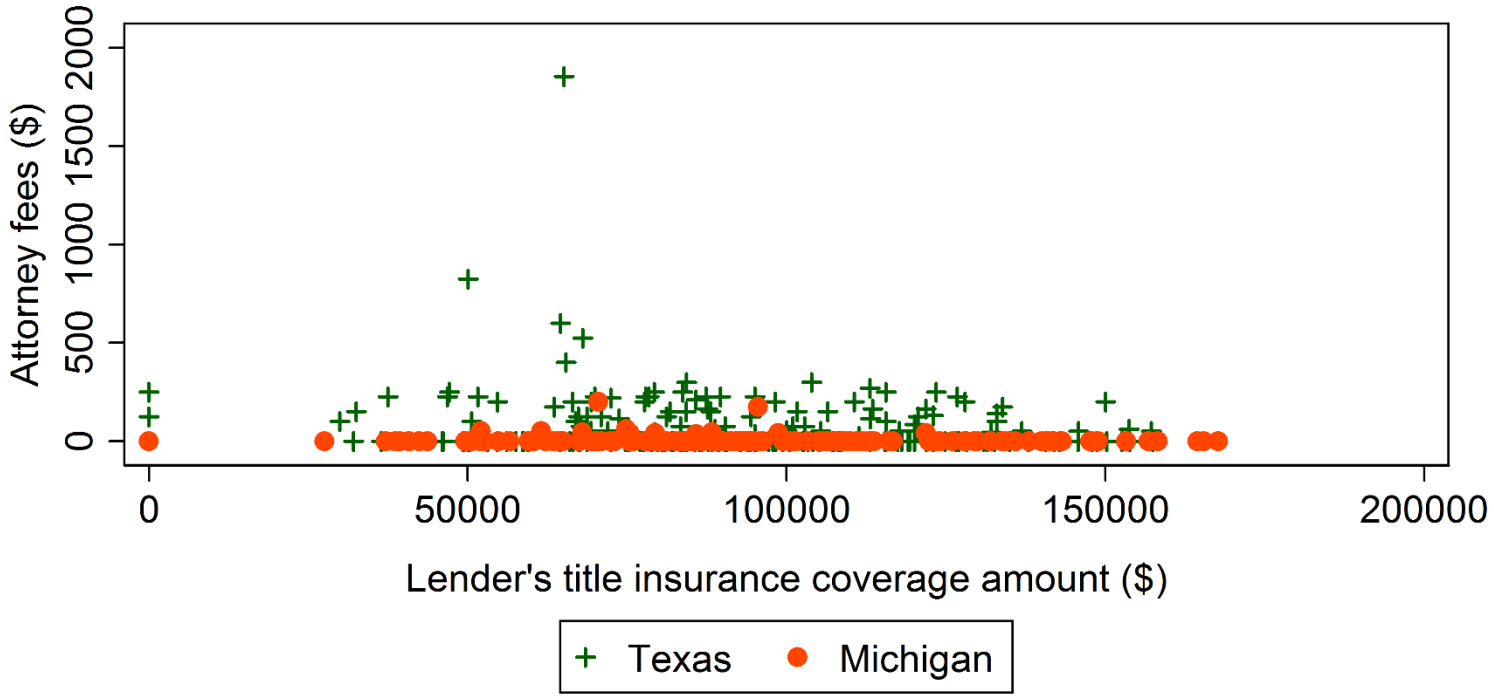
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.22 Comparison of Attorney Fees Between Texas and Massachusetts



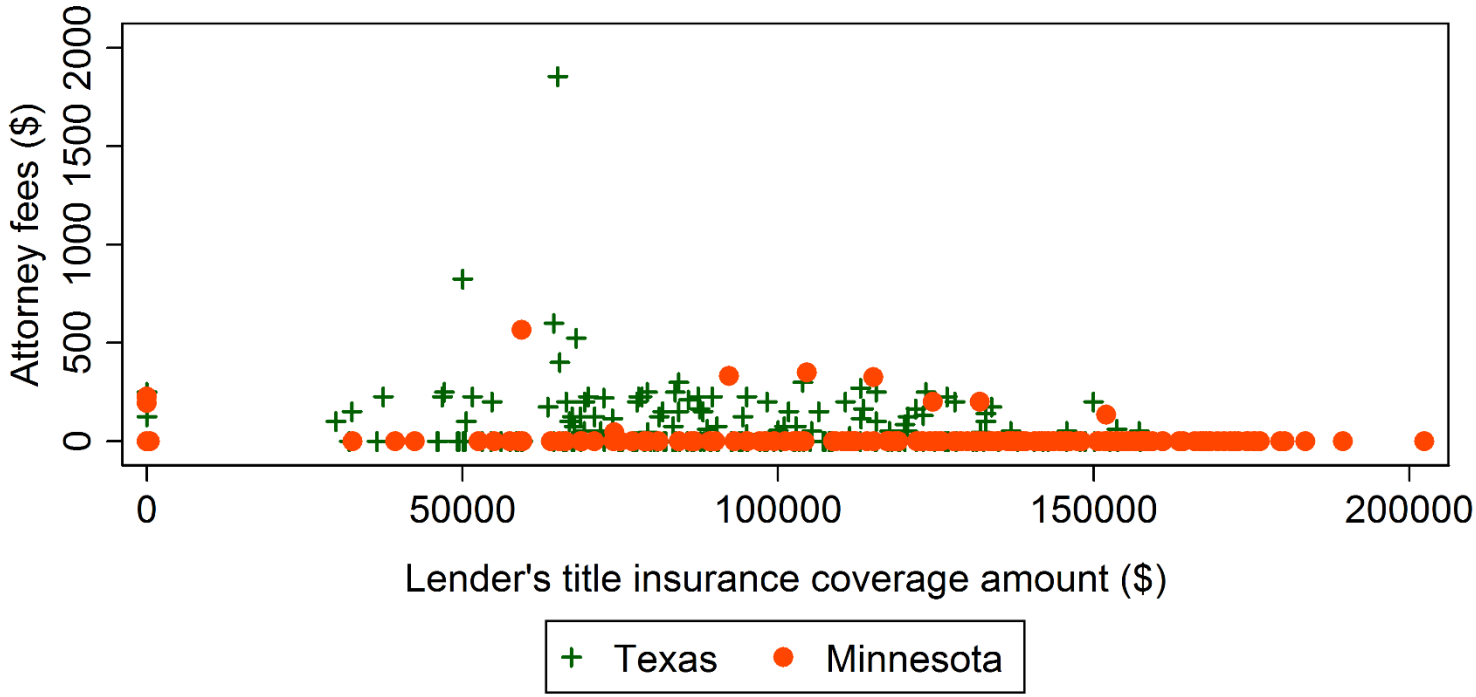
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.23 Comparison of Attorney Fees Between Texas and Michigan



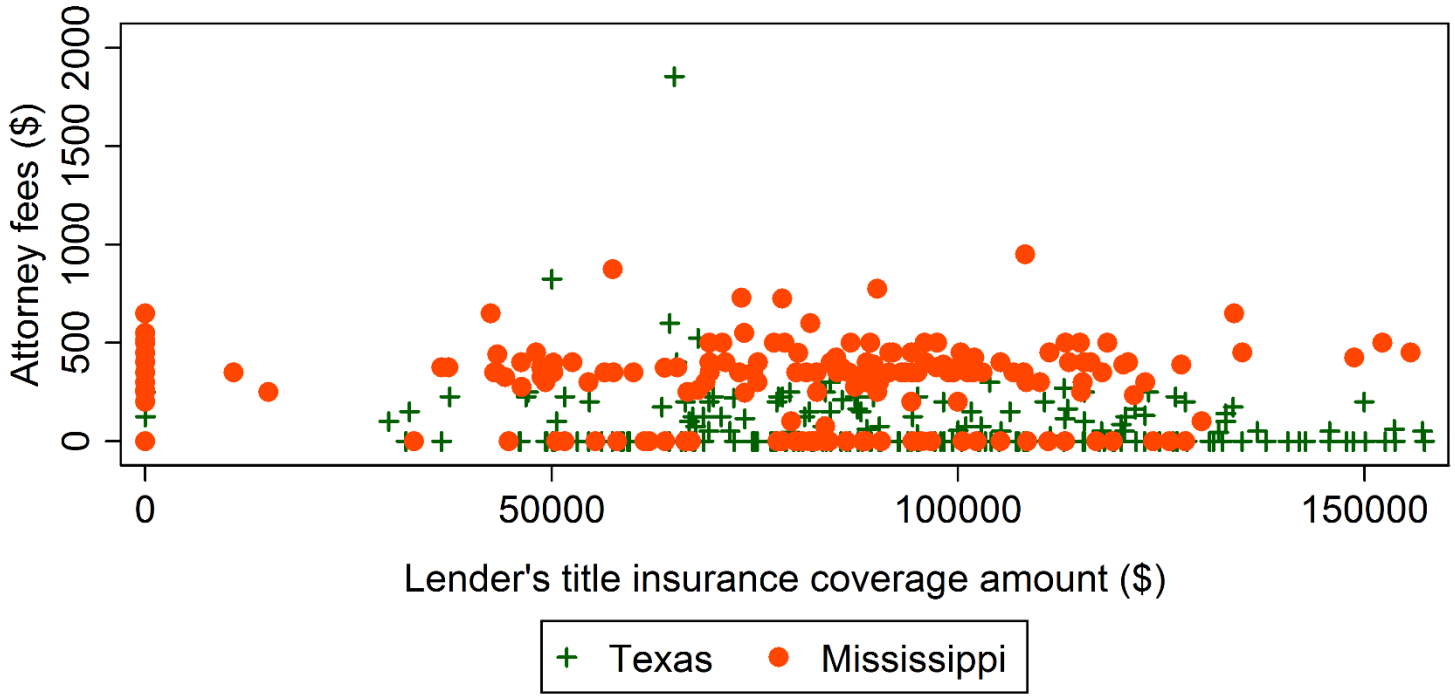
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.24 Comparison of Attorney Fees Between Texas and Minnesota



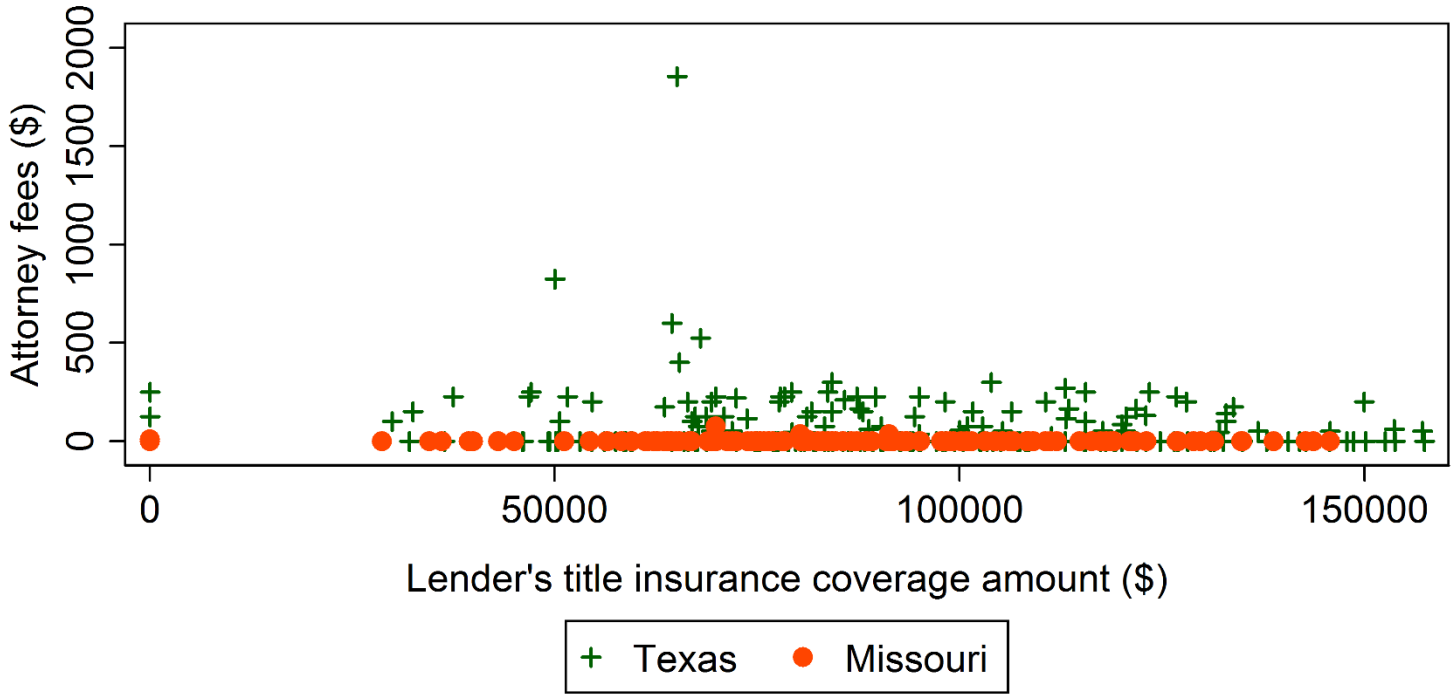
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.25 Comparison of Attorney Fees Between Texas and Mississippi



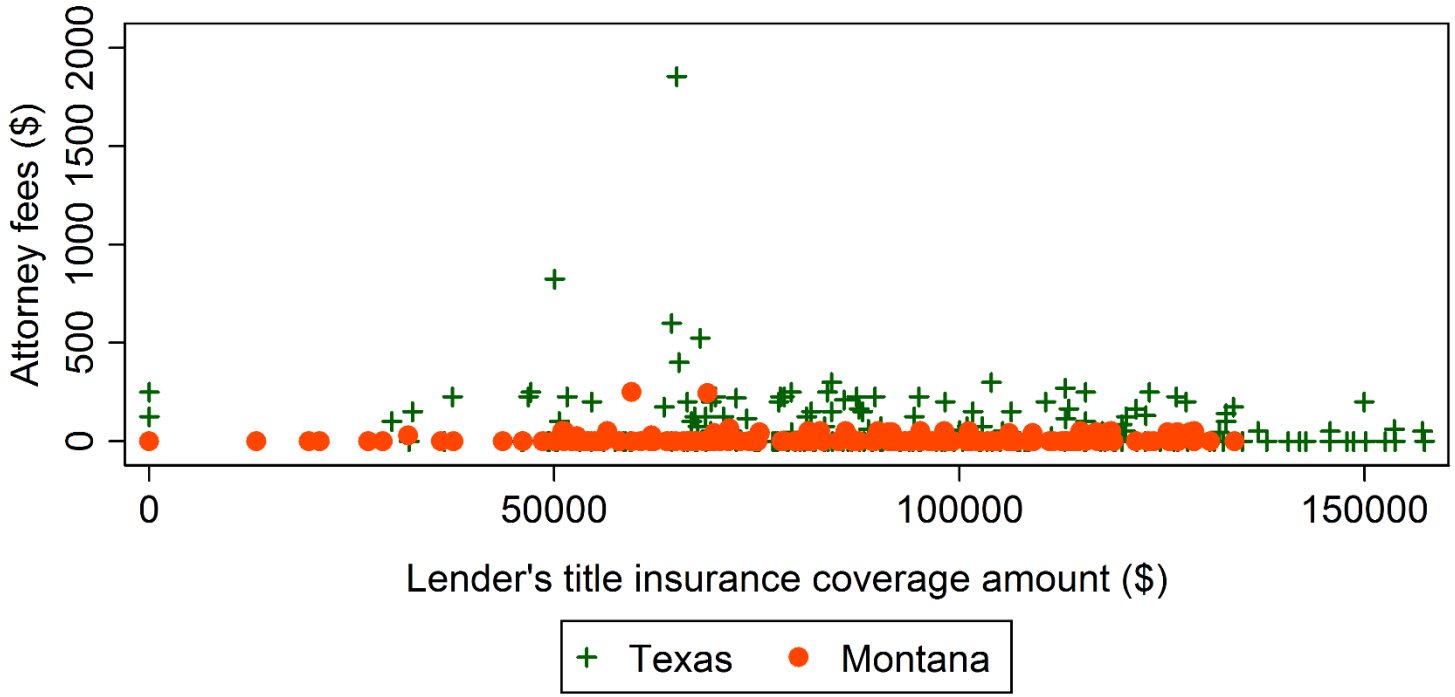
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.26 Comparison of Attorney Fees Between Texas and Missouri



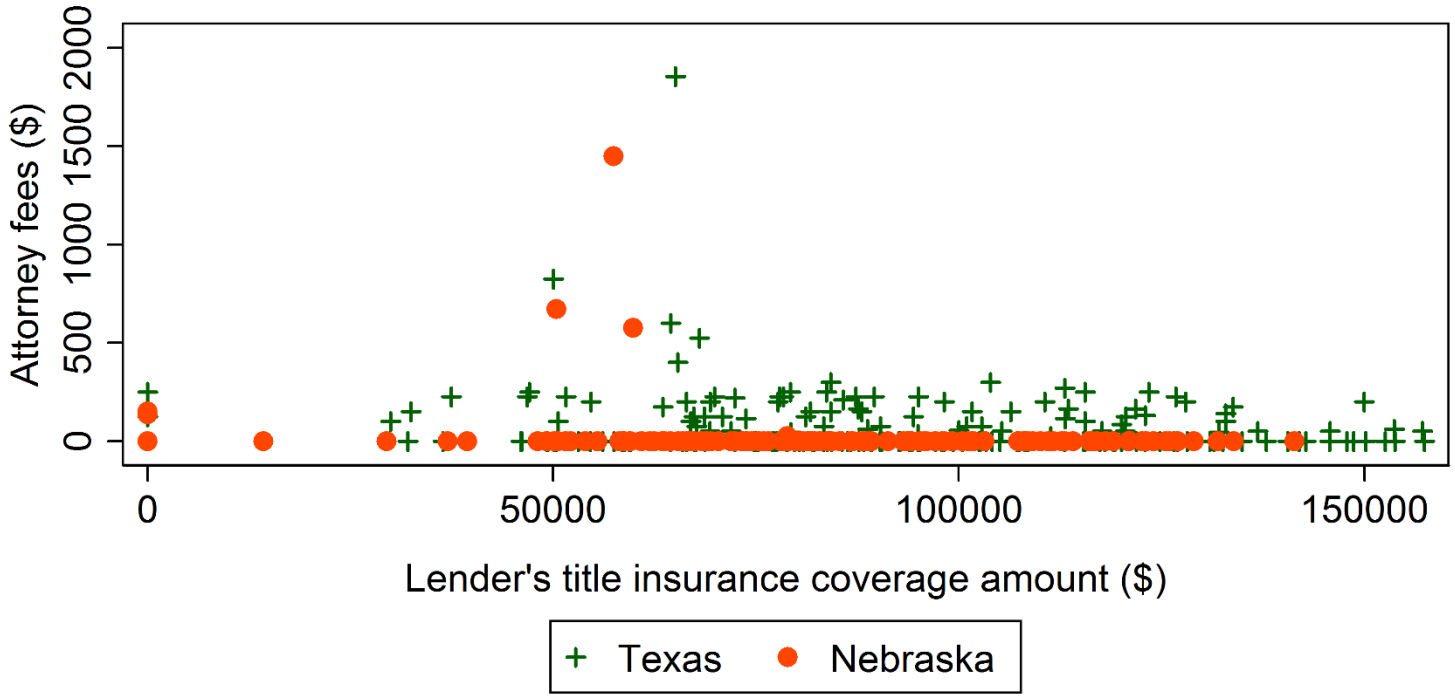
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.27 Comparison of Attorney Fees Between Texas and Montana



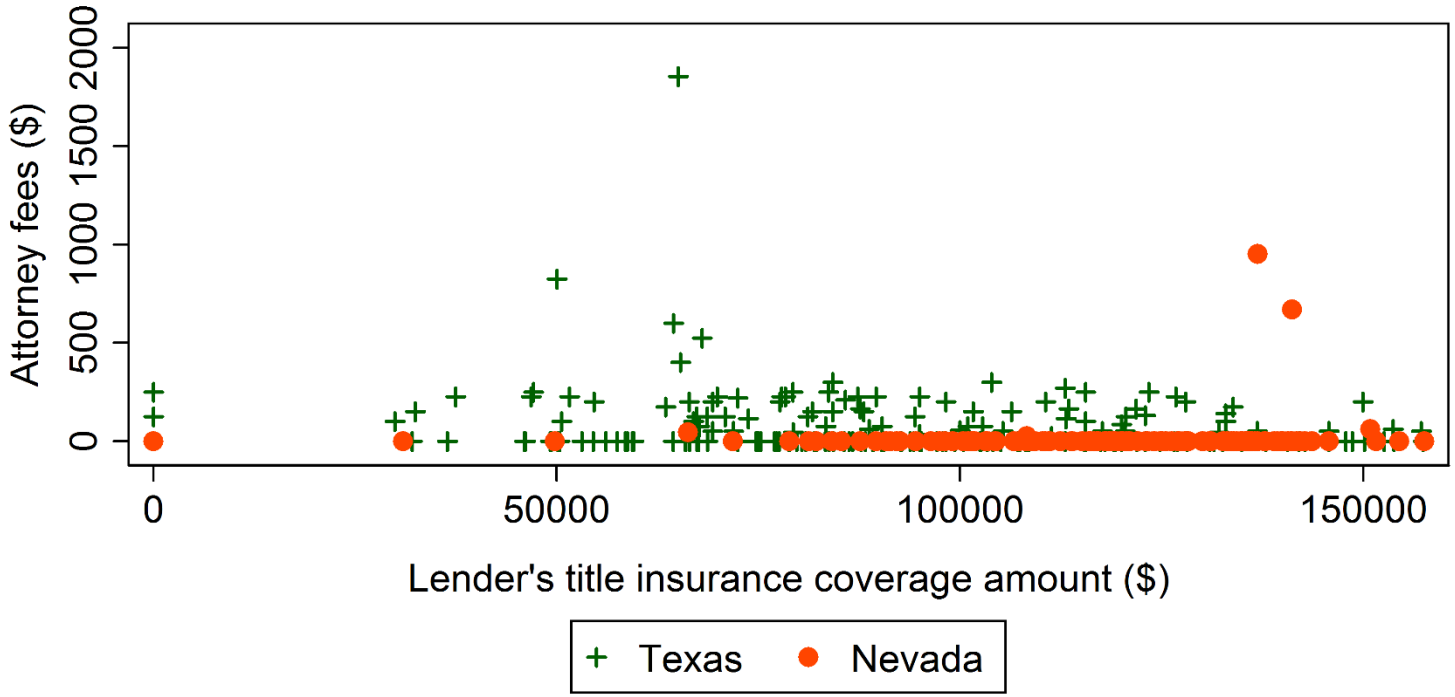
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.28 Comparison of Attorney Fees Between Texas and Nebraska



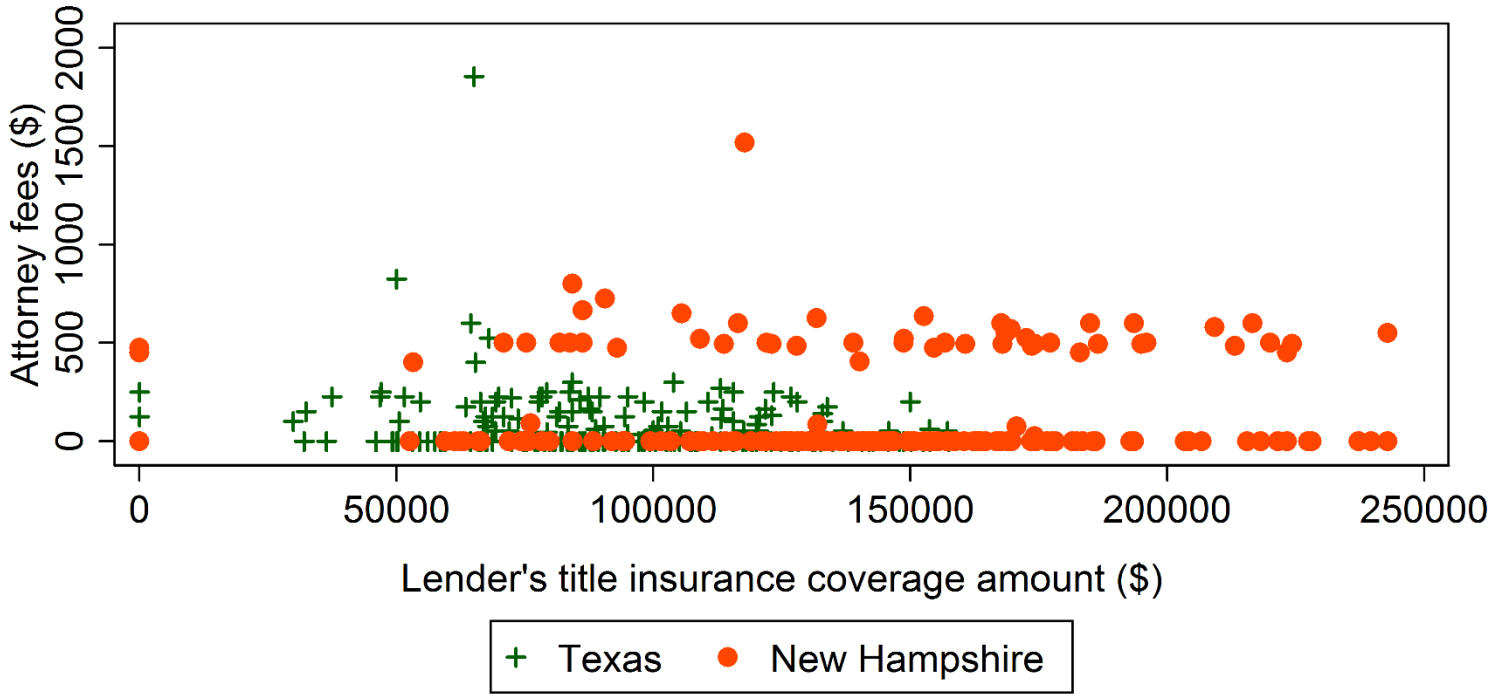
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.29 Comparison of Attorney Fees Between Texas and Nevada



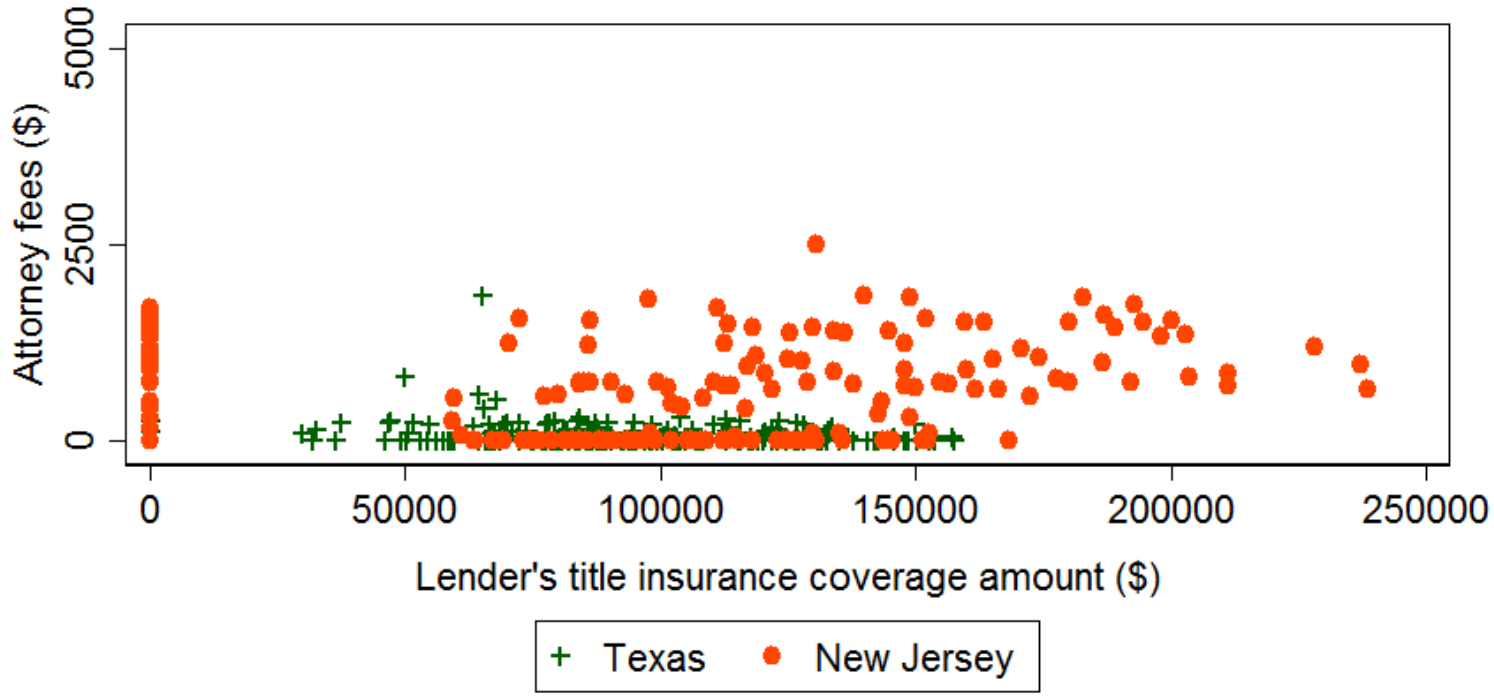
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.30 Comparison of Attorney Fees Between Texas and New Hampshire



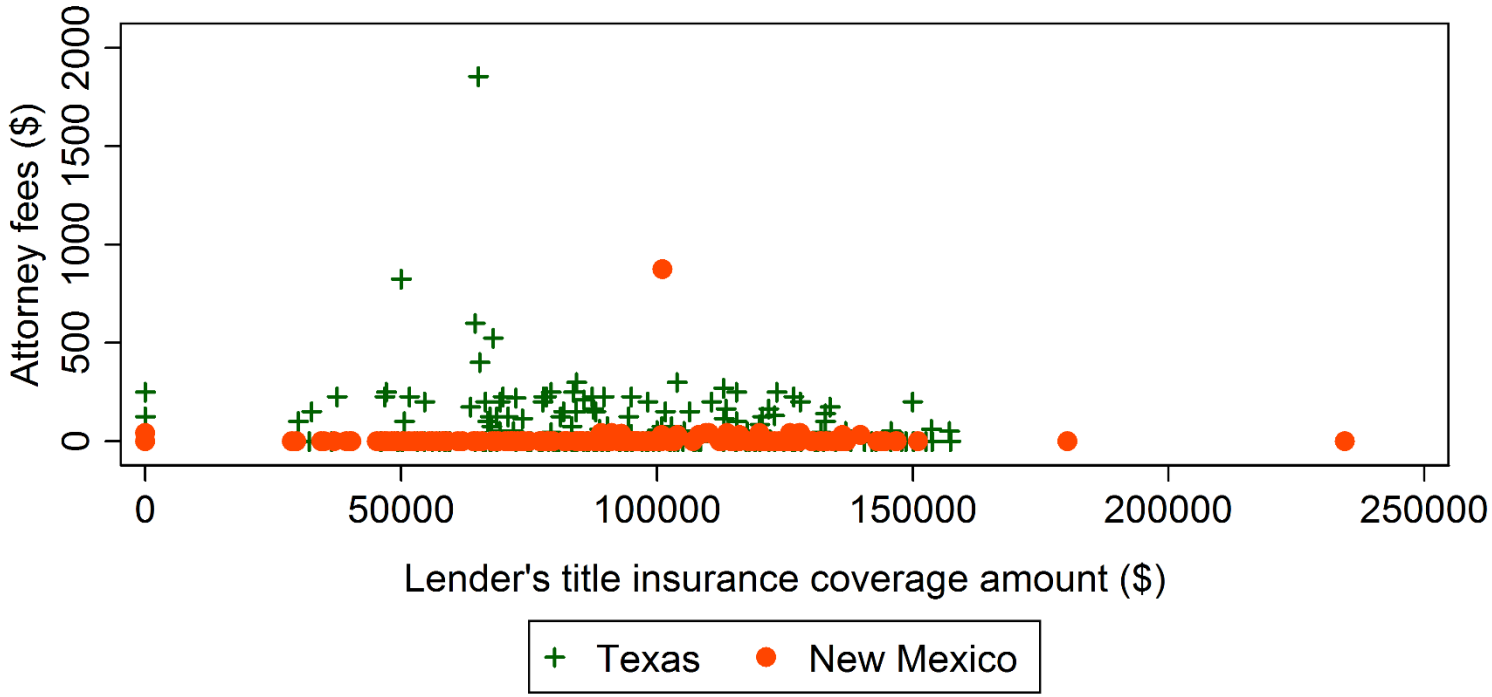
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.31 Comparison of Attorney Fees Between Texas and New Jersey



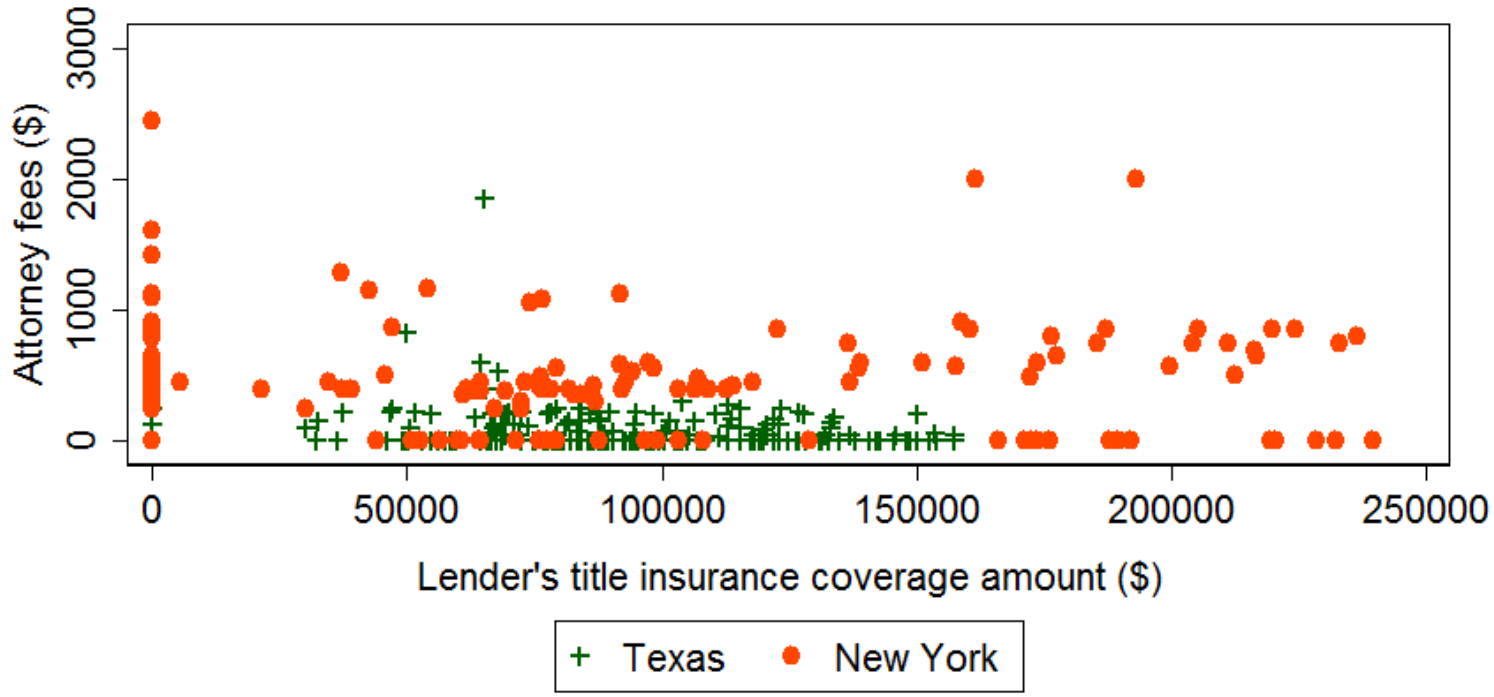
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.32 Comparison of Attorney Fees Between Texas and New Mexico



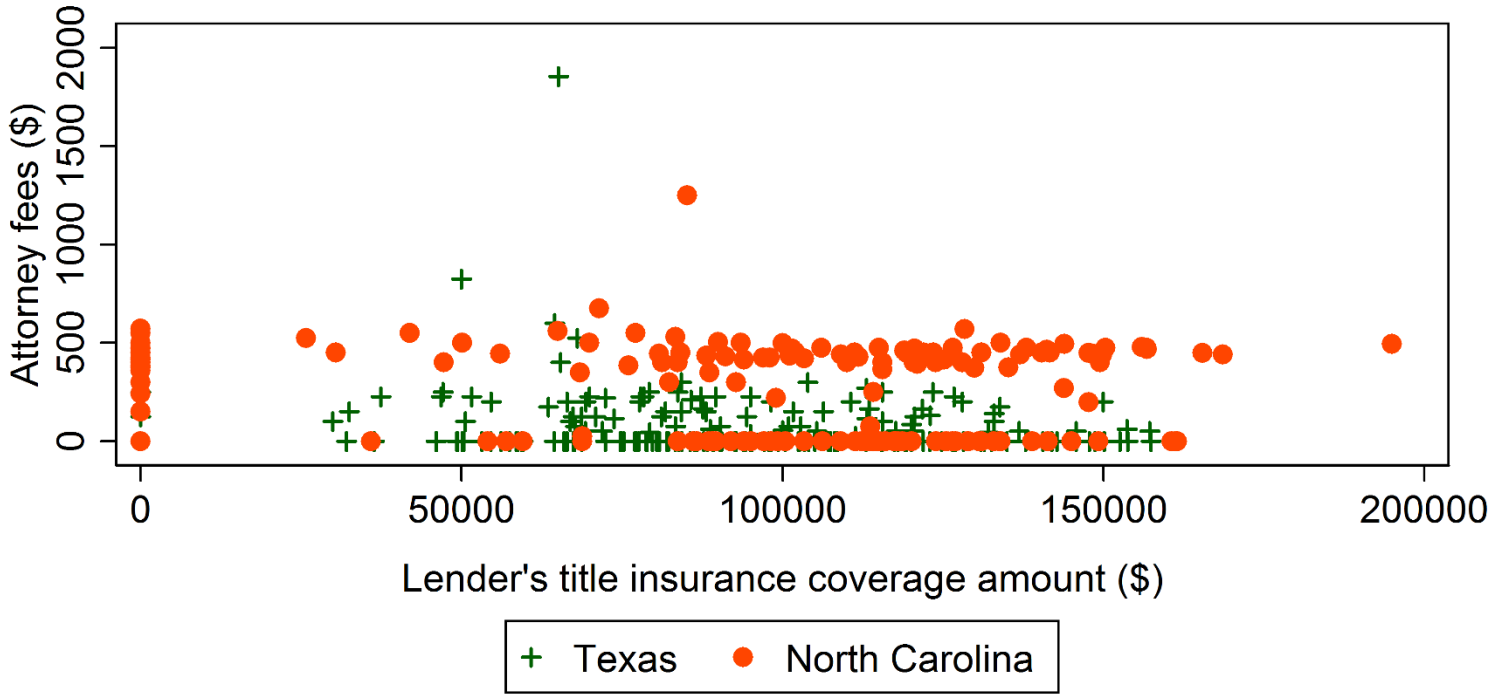
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.33 Comparison of Attorney Fees Between Texas and New York



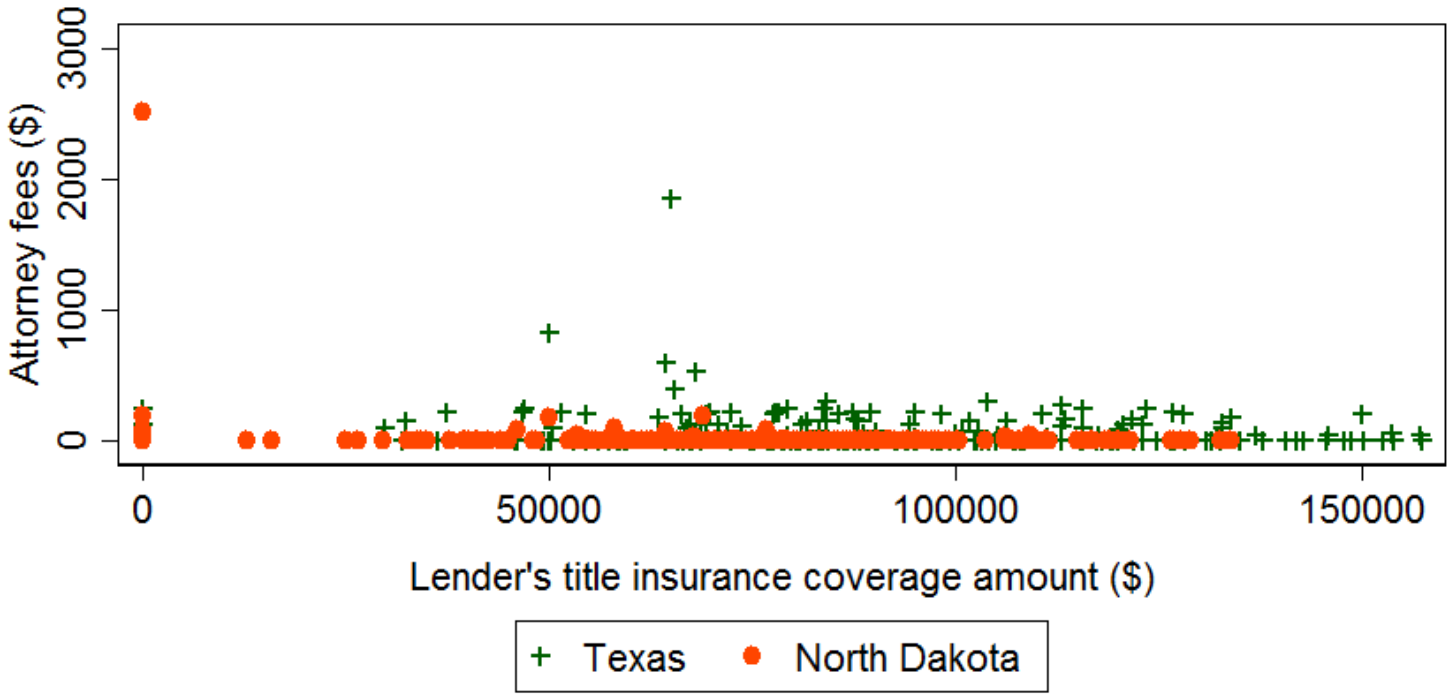
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.34 Comparison of Attorney Fees Between Texas and North Carolina



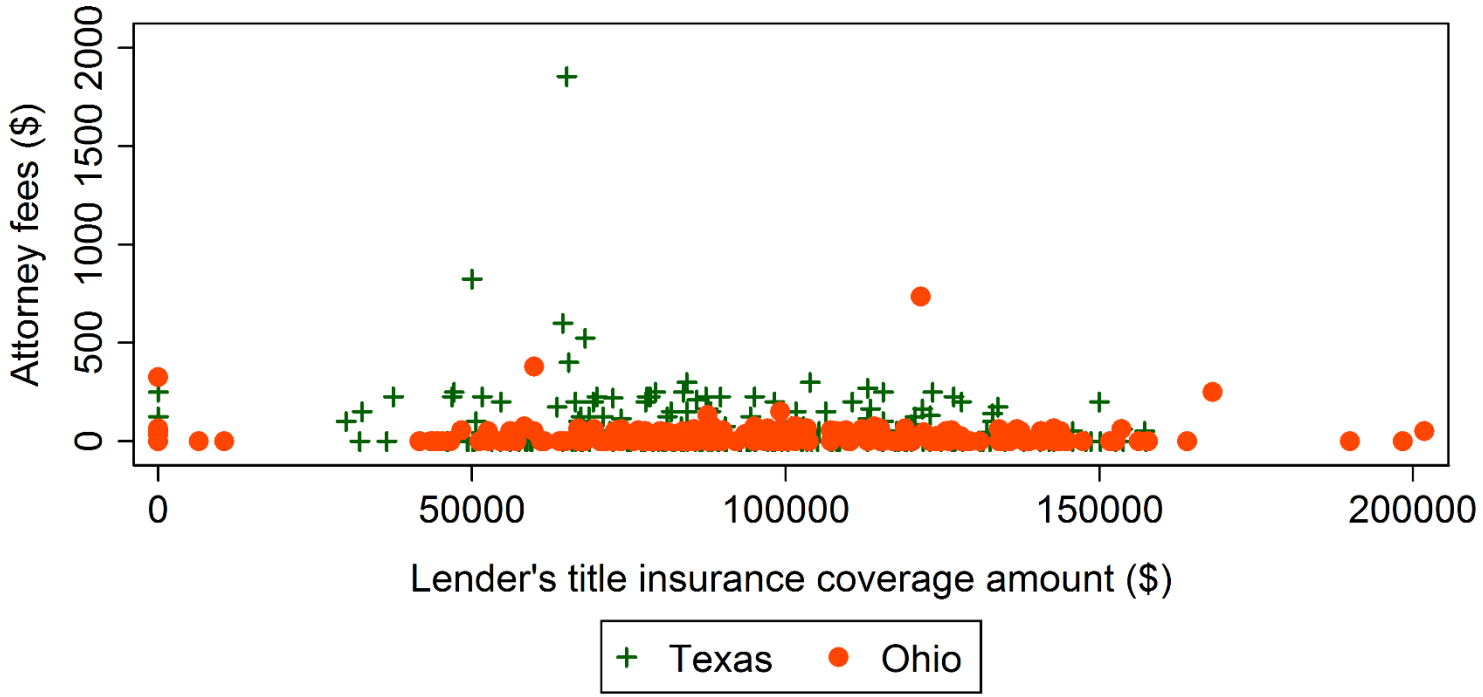
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.35 Comparison of Attorney Fees Between Texas and North Dakota



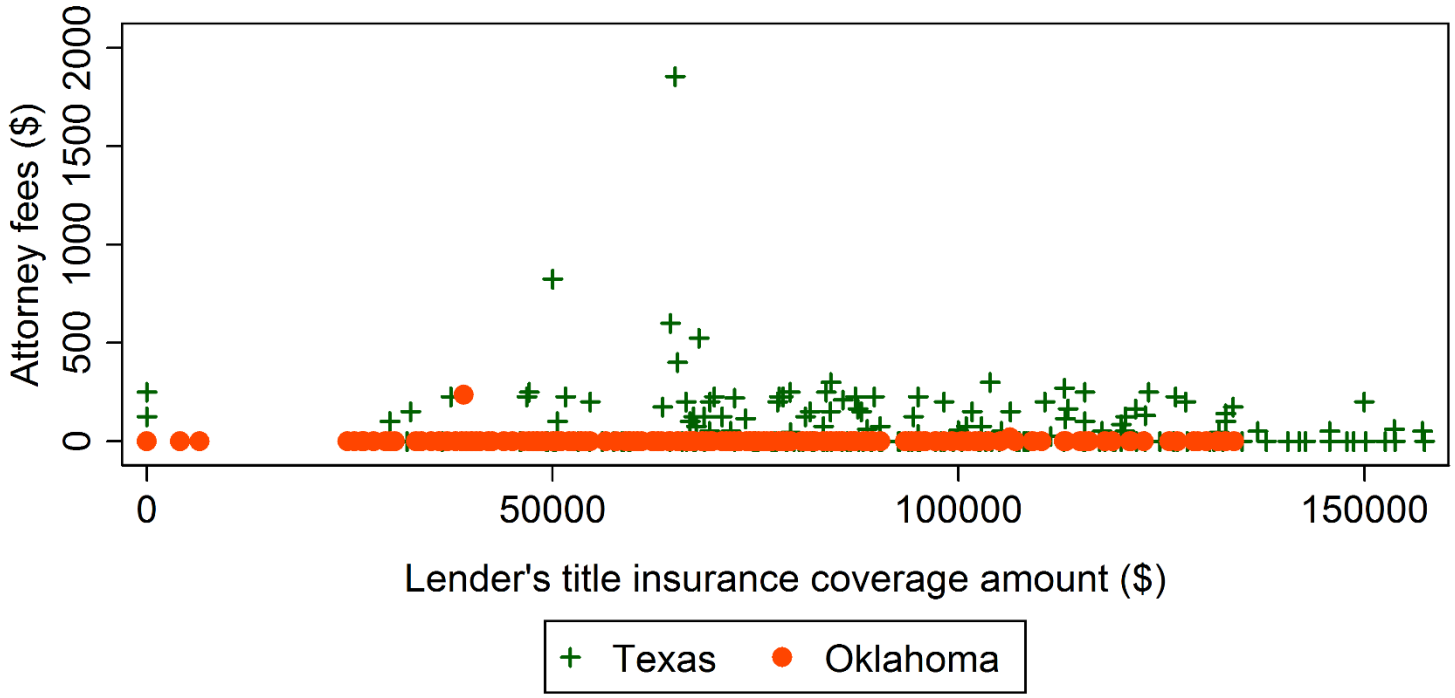
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.36 Comparison of Attorney Fees Between Texas and Ohio



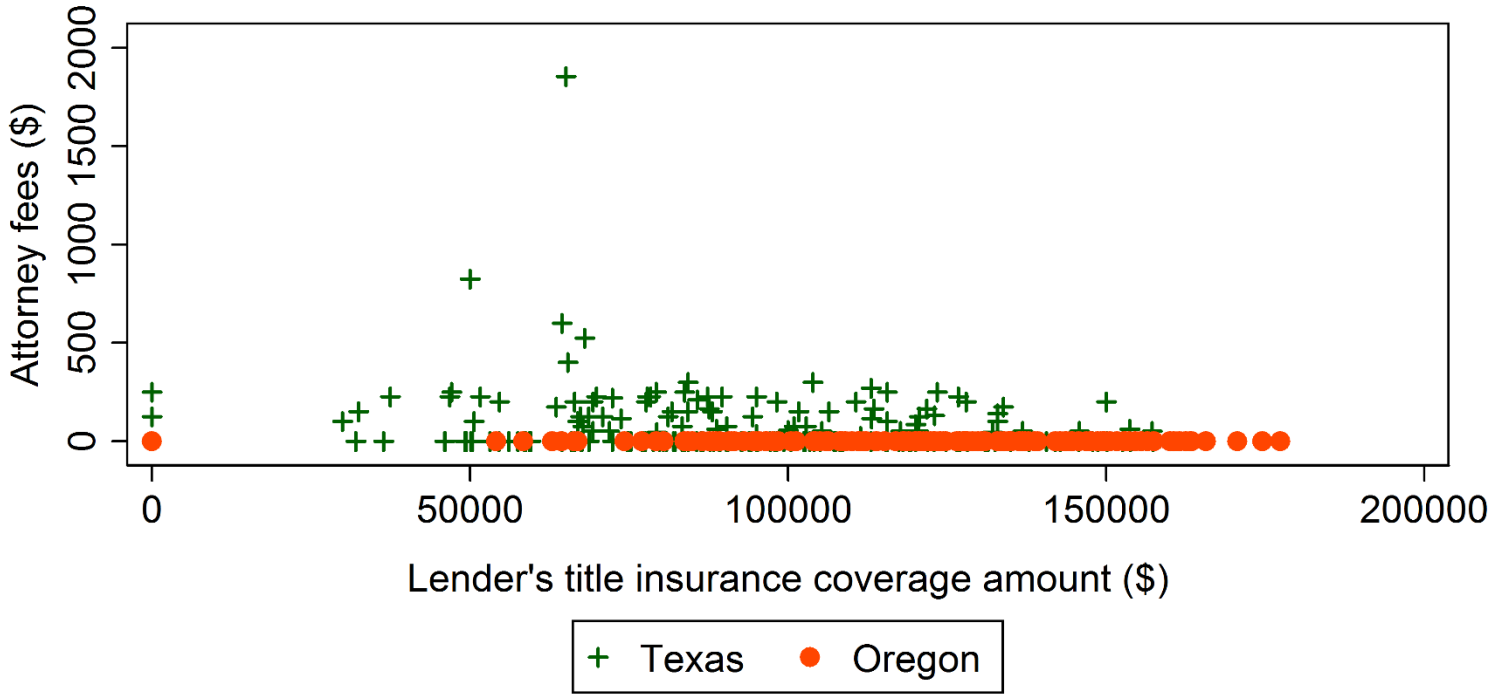
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.37 Comparison of Attorney Fees Between Texas and Oklahoma



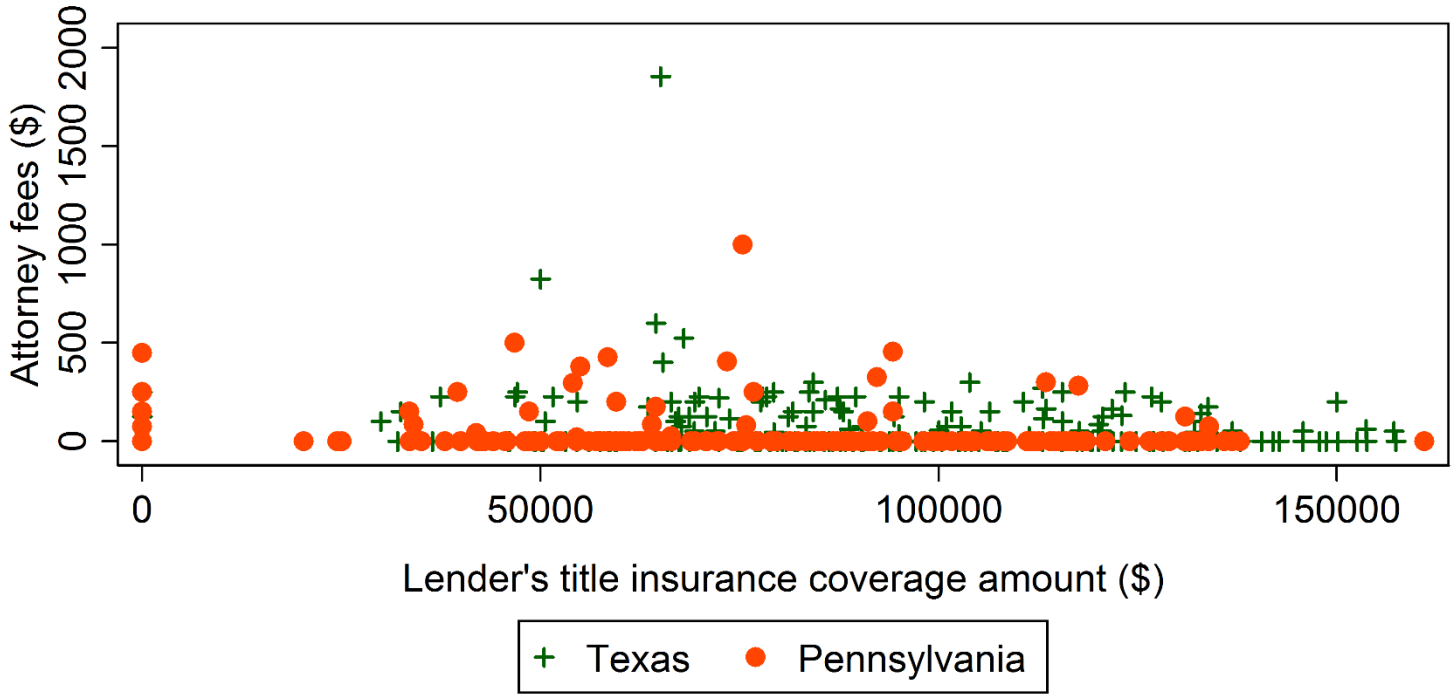
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.38 Comparison of Attorney Fees Between Texas and Oregon



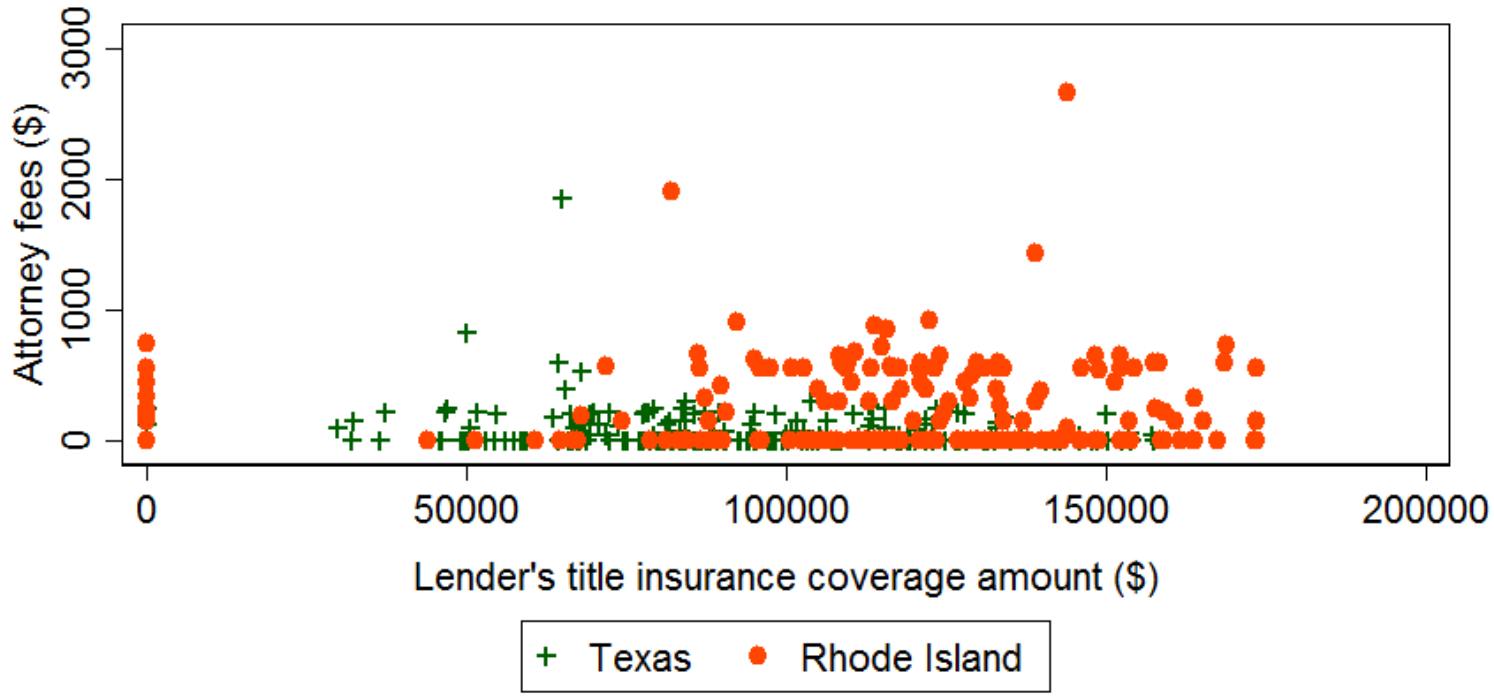
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.39 Comparison of Attorney Fees Between Texas and Pennsylvania



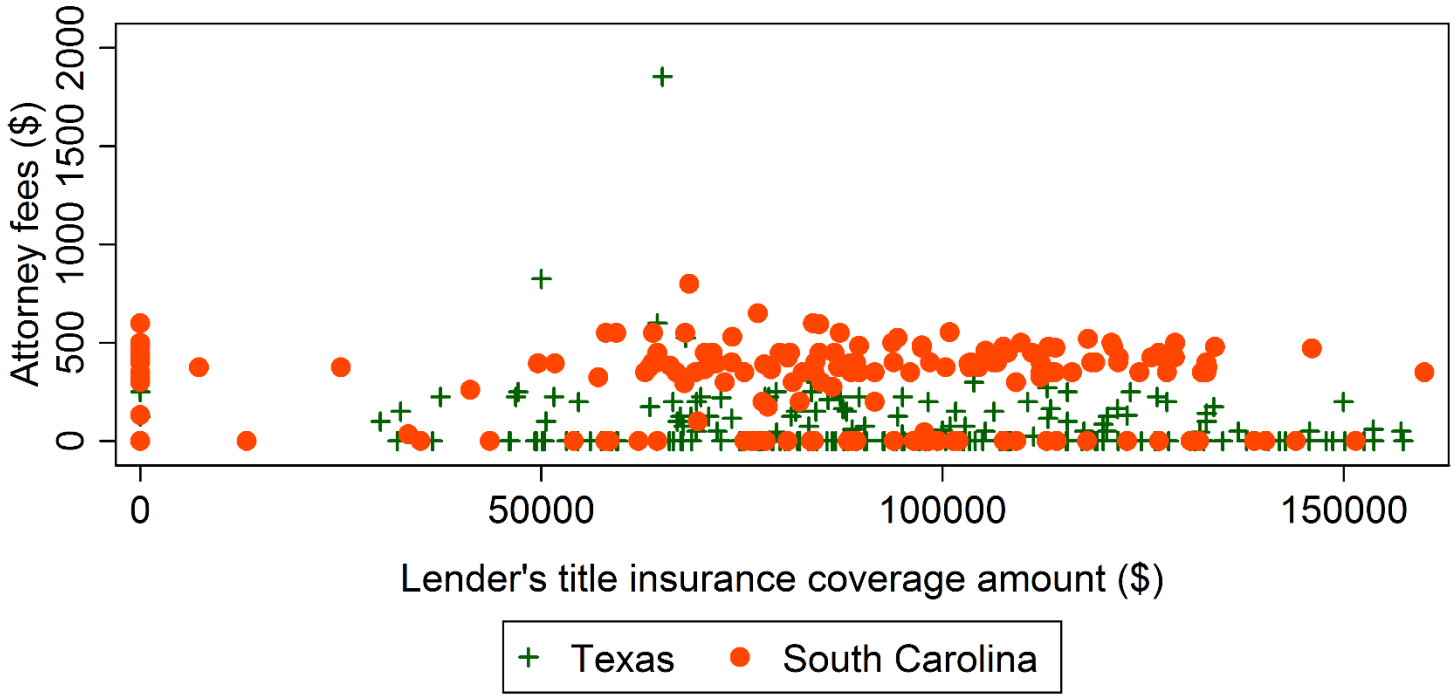
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.40 Comparison of Attorney Fees Between Texas and Rhode Island



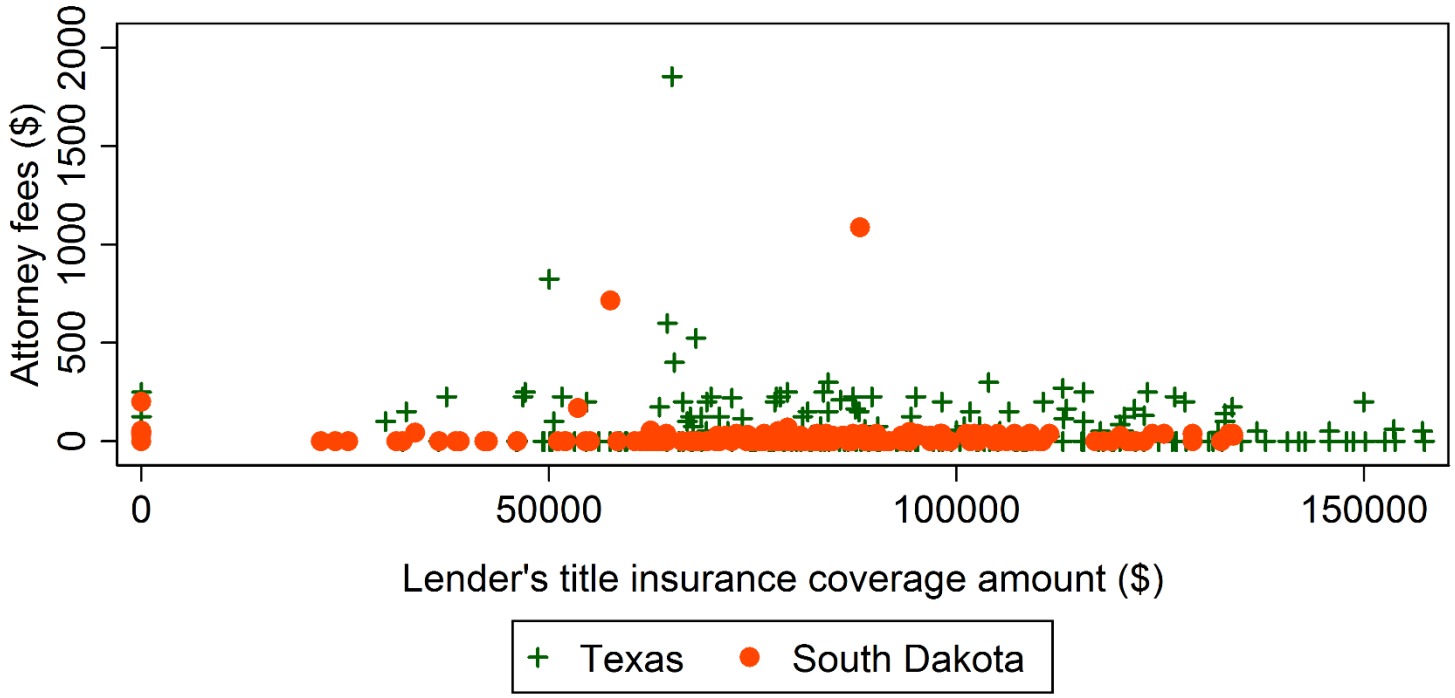
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.41 Comparison of Attorney Fees Between Texas and South Carolina



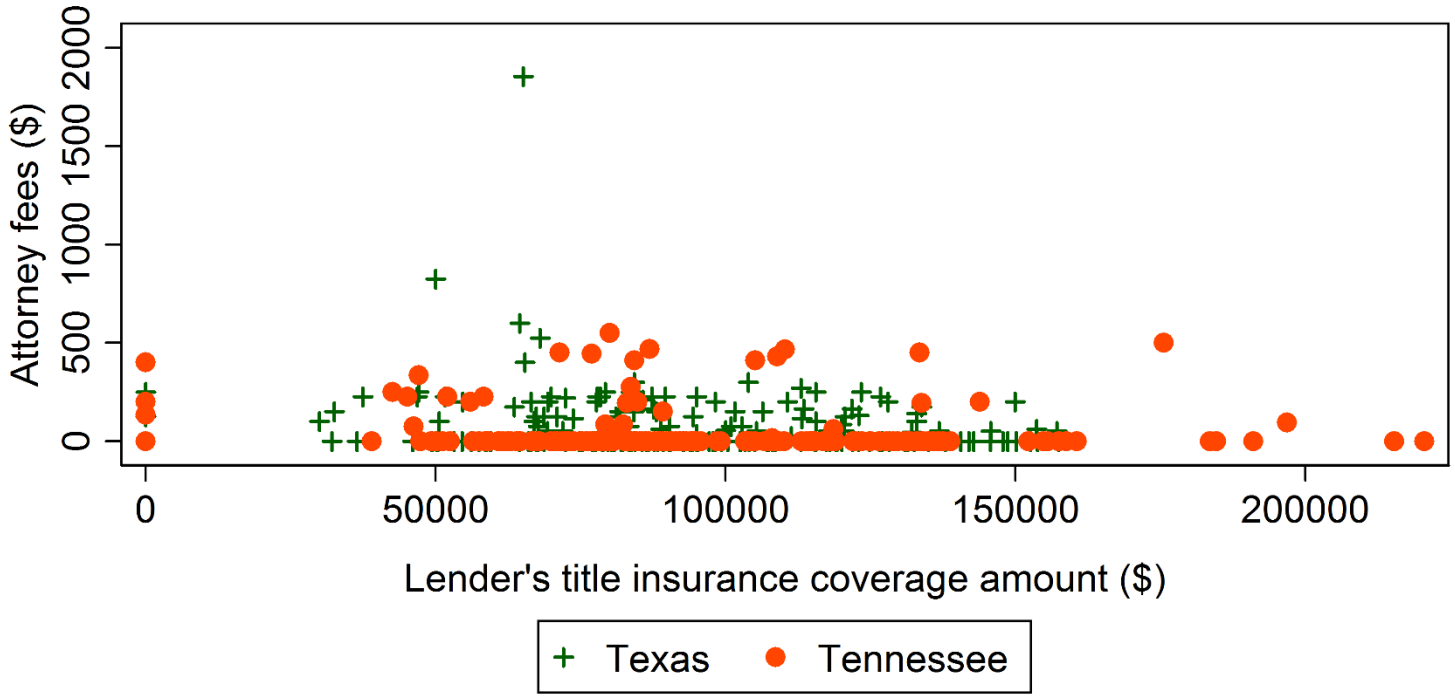
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.42 Comparison of Attorney Fees Between Texas and South Dakota



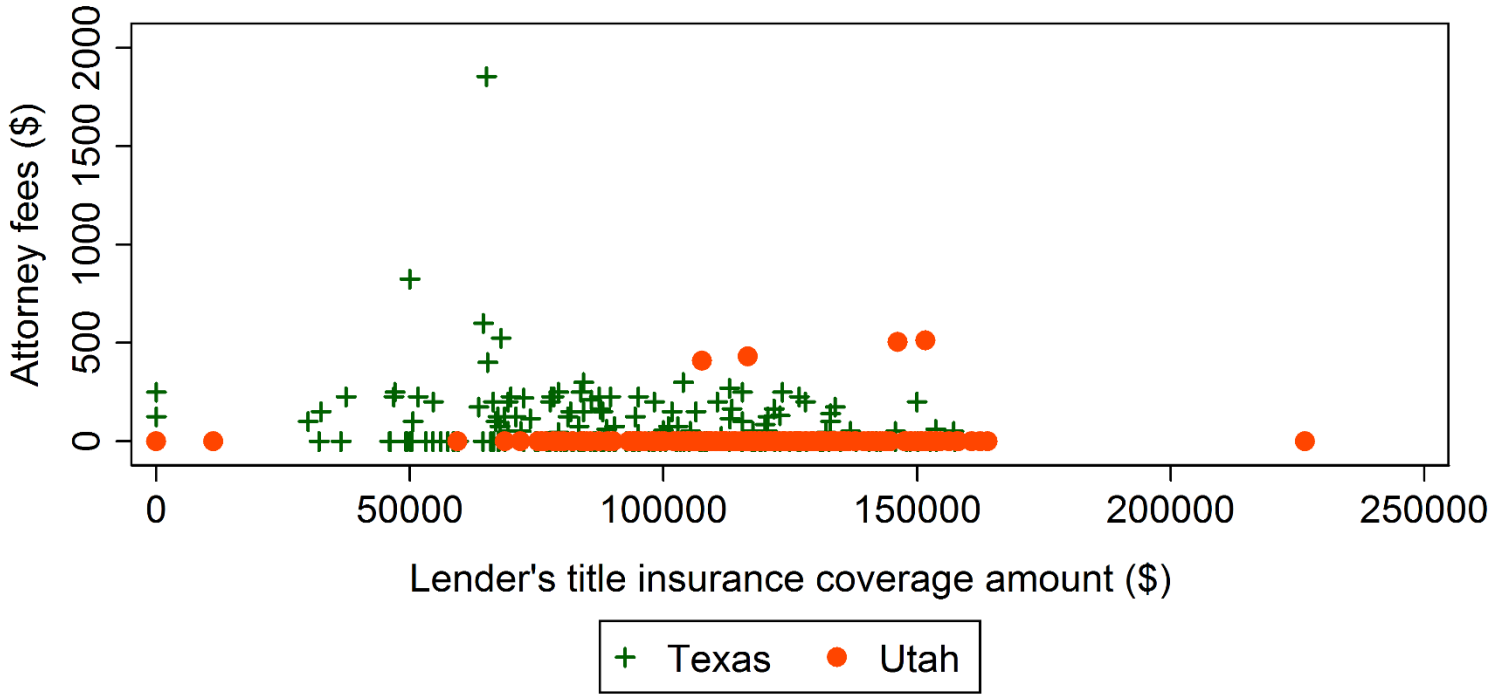
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.43 Comparison of Attorney Fees Between Texas and Tennessee



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.44 Comparison of Attorney Fees Between Texas and Utah



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.45 Comparison of Attorney Fees Between Texas and Vermont

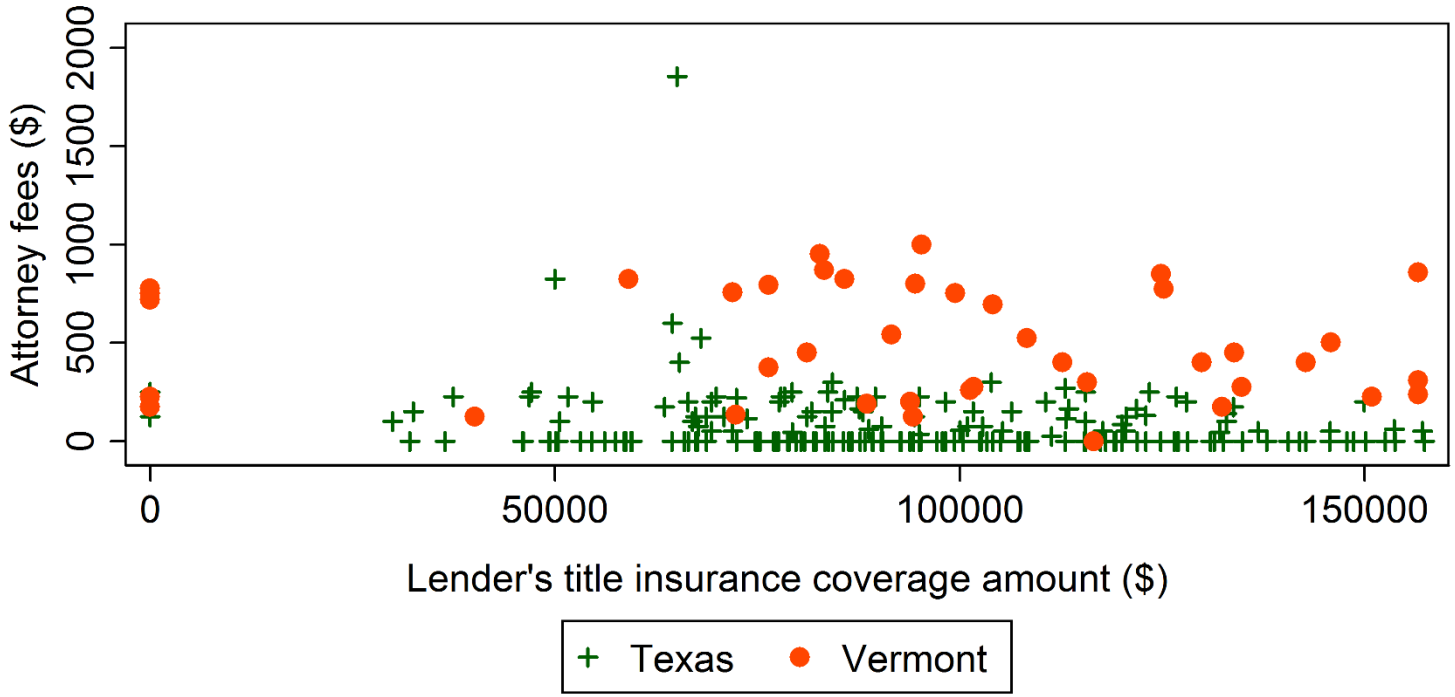


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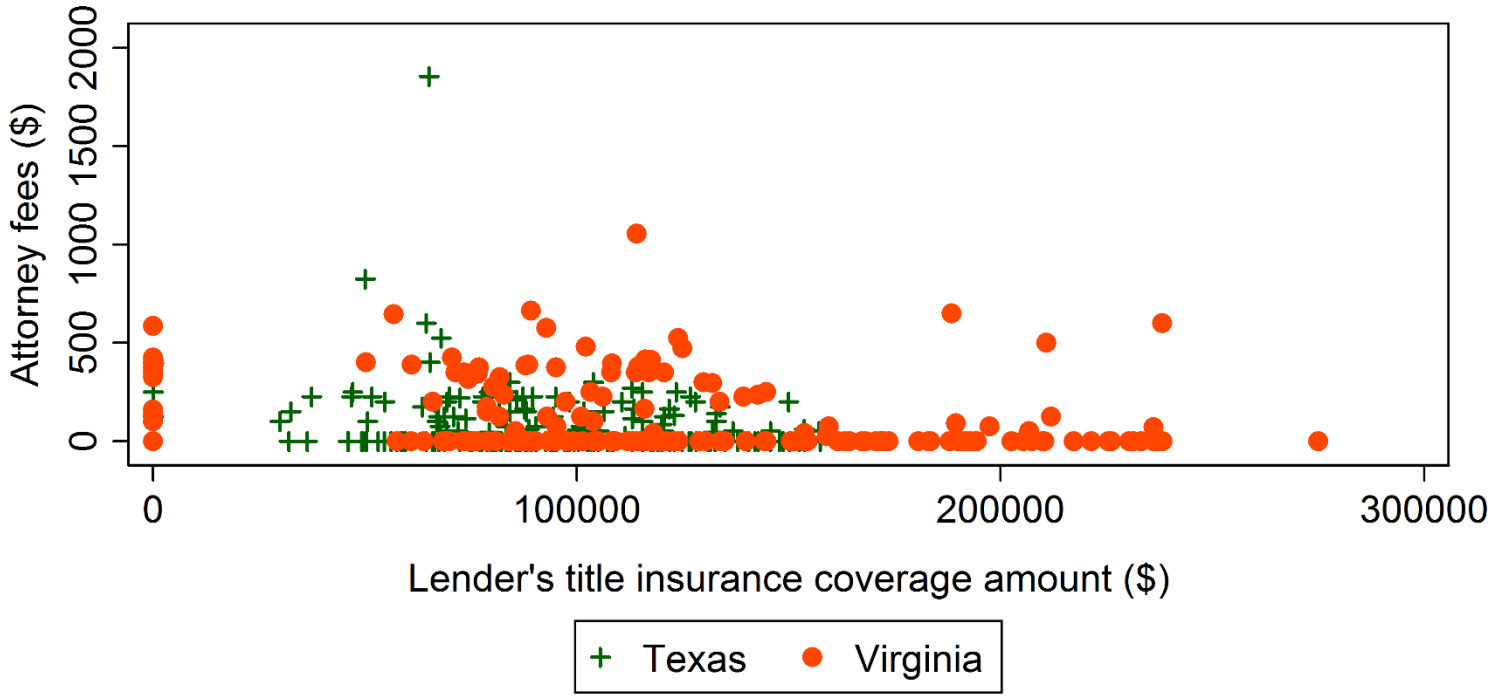
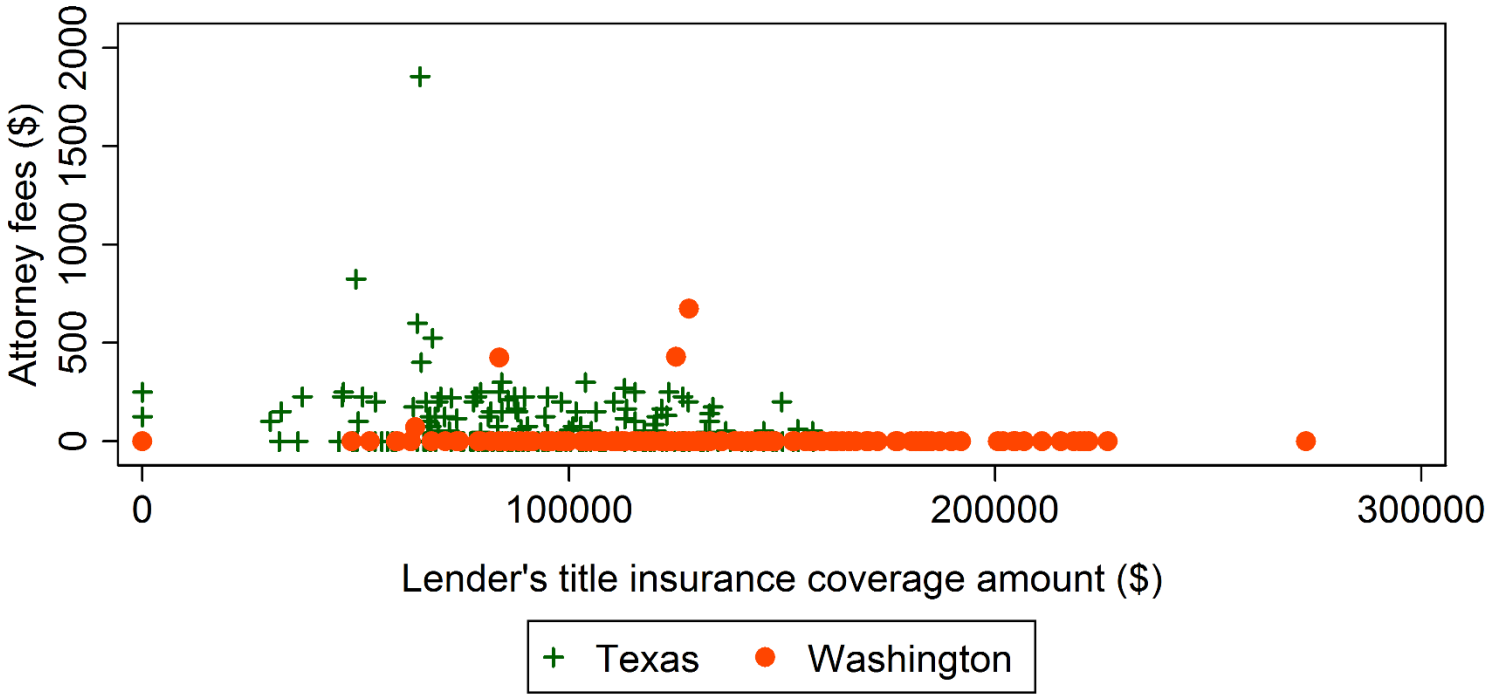
Figure 1.8.46 Comparison of Attorney Fees Between Texas and Virginia



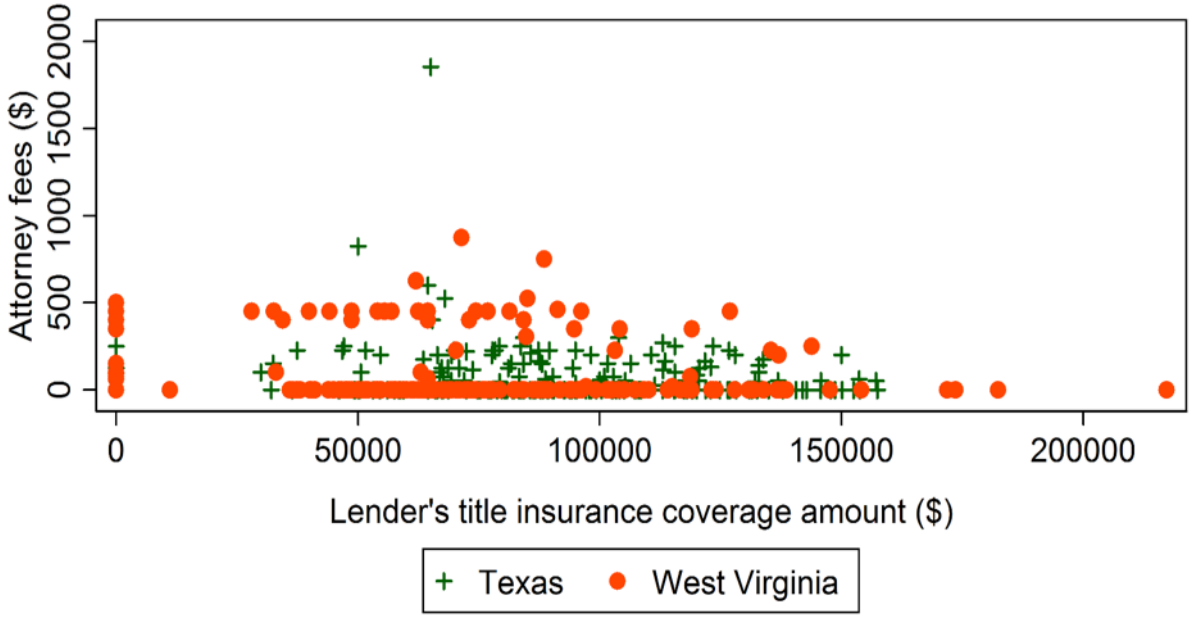
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.47 Comparison of Attorney Fees Between Texas and Washington



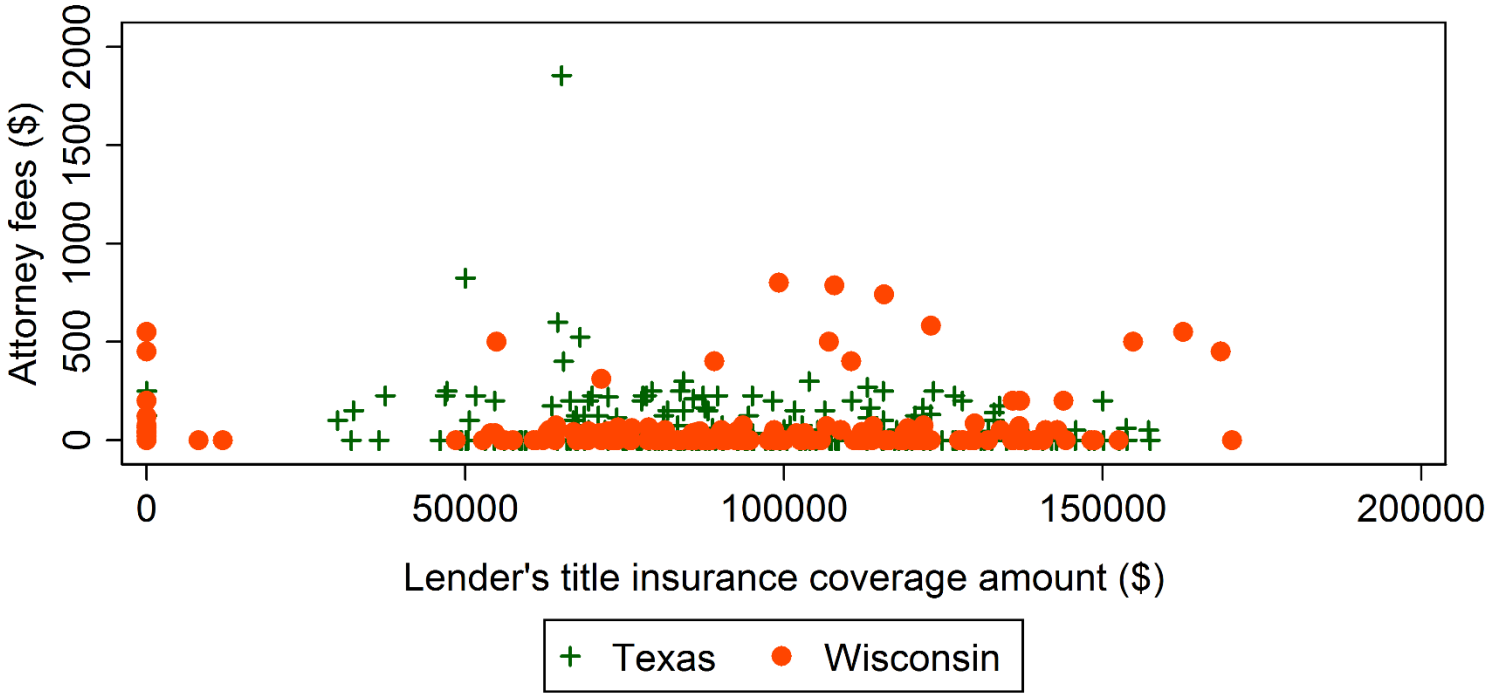
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.48 Comparison of Attorney Fees Between Texas and West Virginia



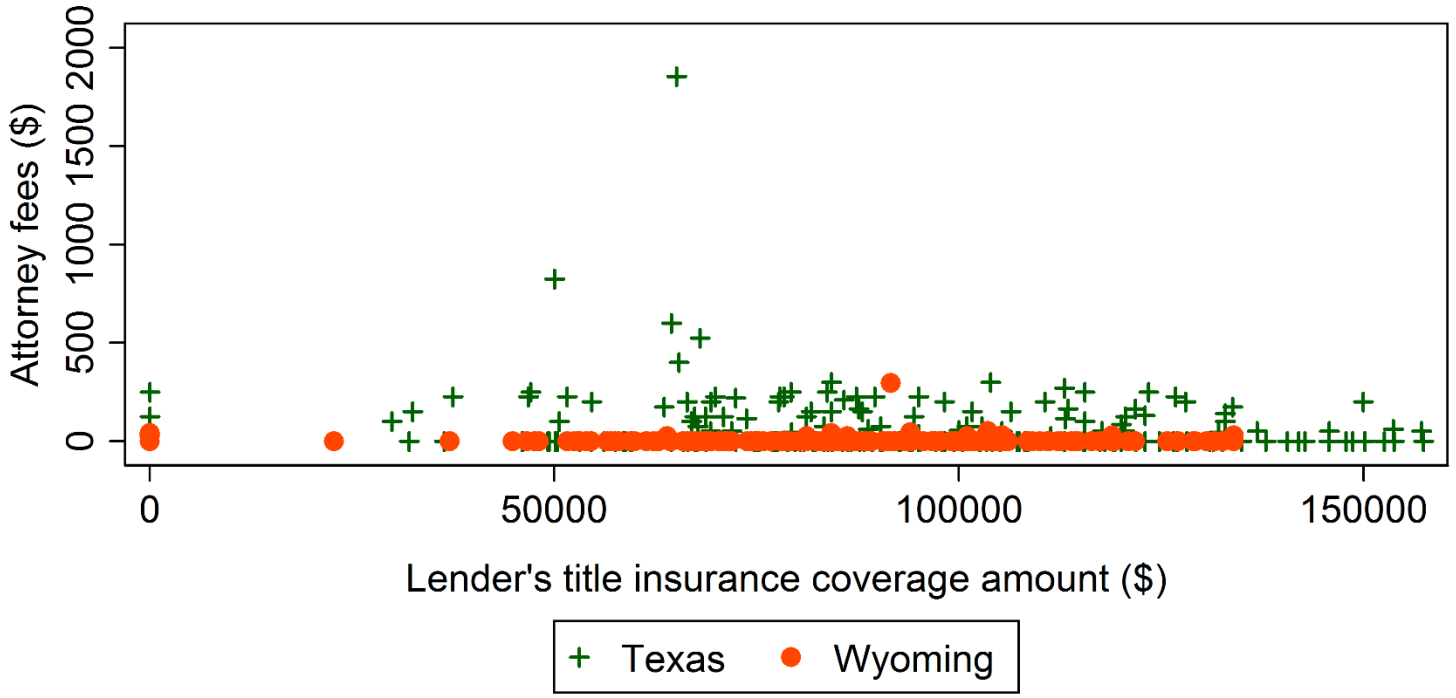
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.49 Comparison of Attorney Fees Between Texas and Wisconsin



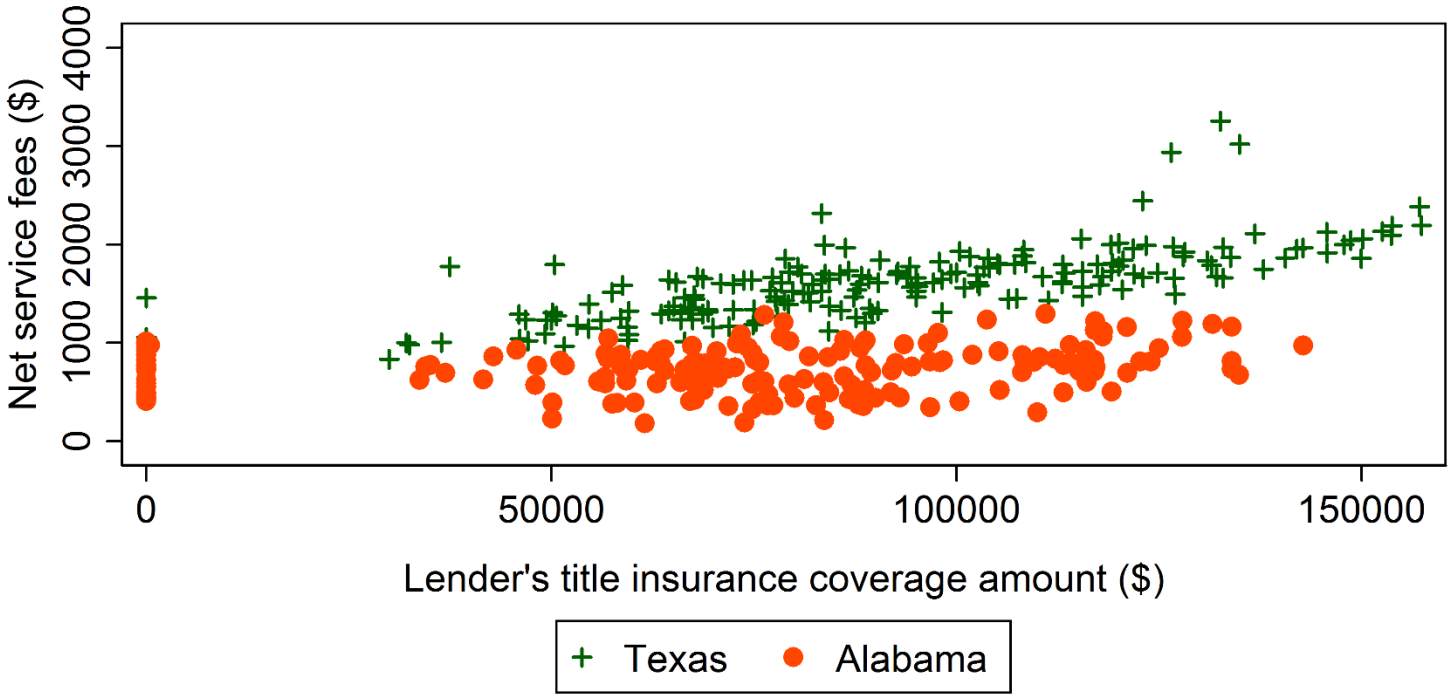
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.8.50 Comparison of Attorney Fees Between Texas and Wyoming



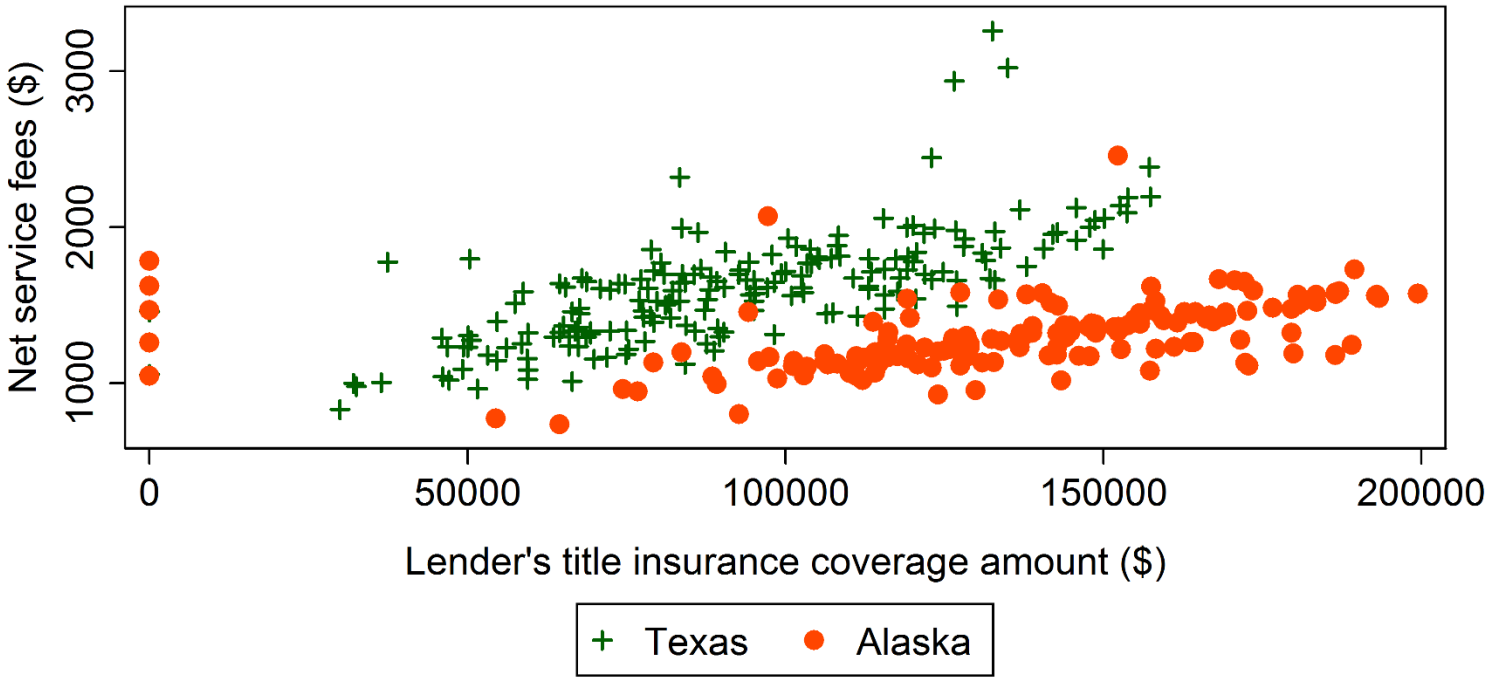
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.1 Comparison of Net Service Fees Between Texas and Alabama



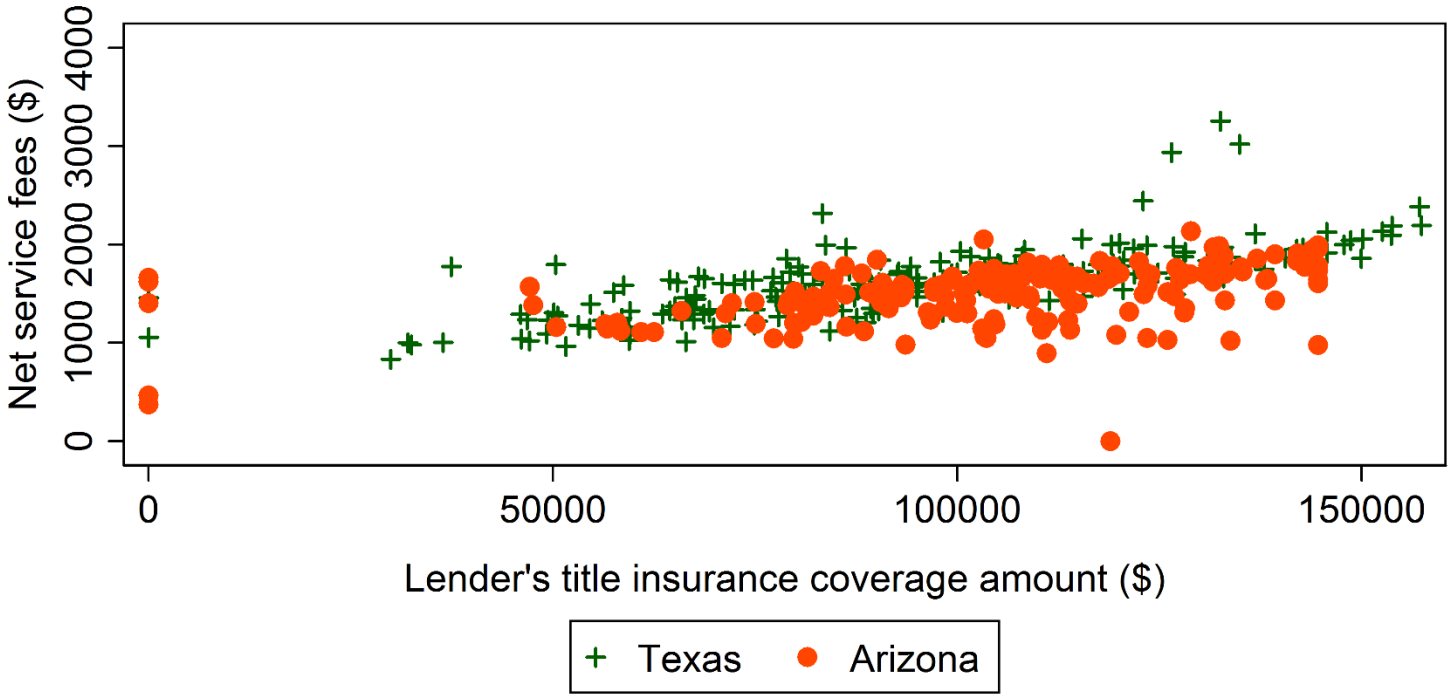
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.2 Comparison of Net Service Fees Between Texas and Alaska



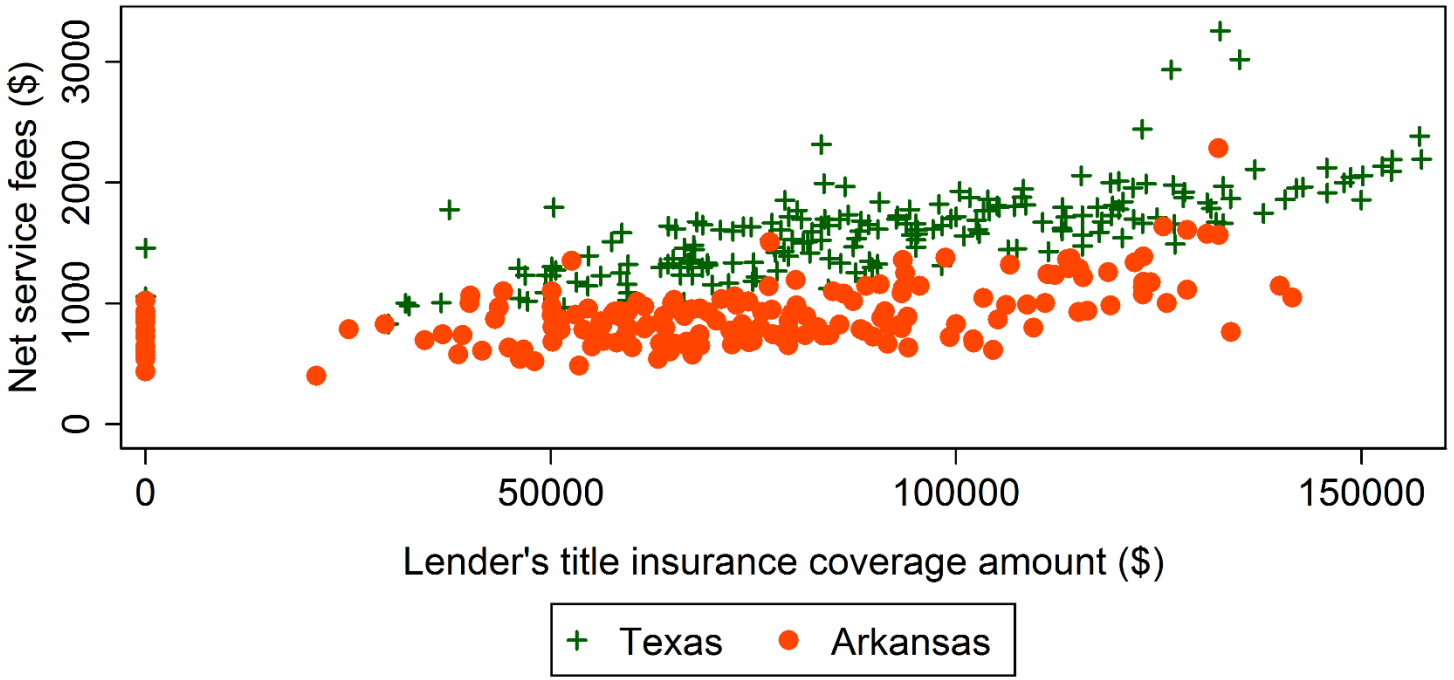
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.3 Comparison of Net Service Fees Between Texas and Arizona



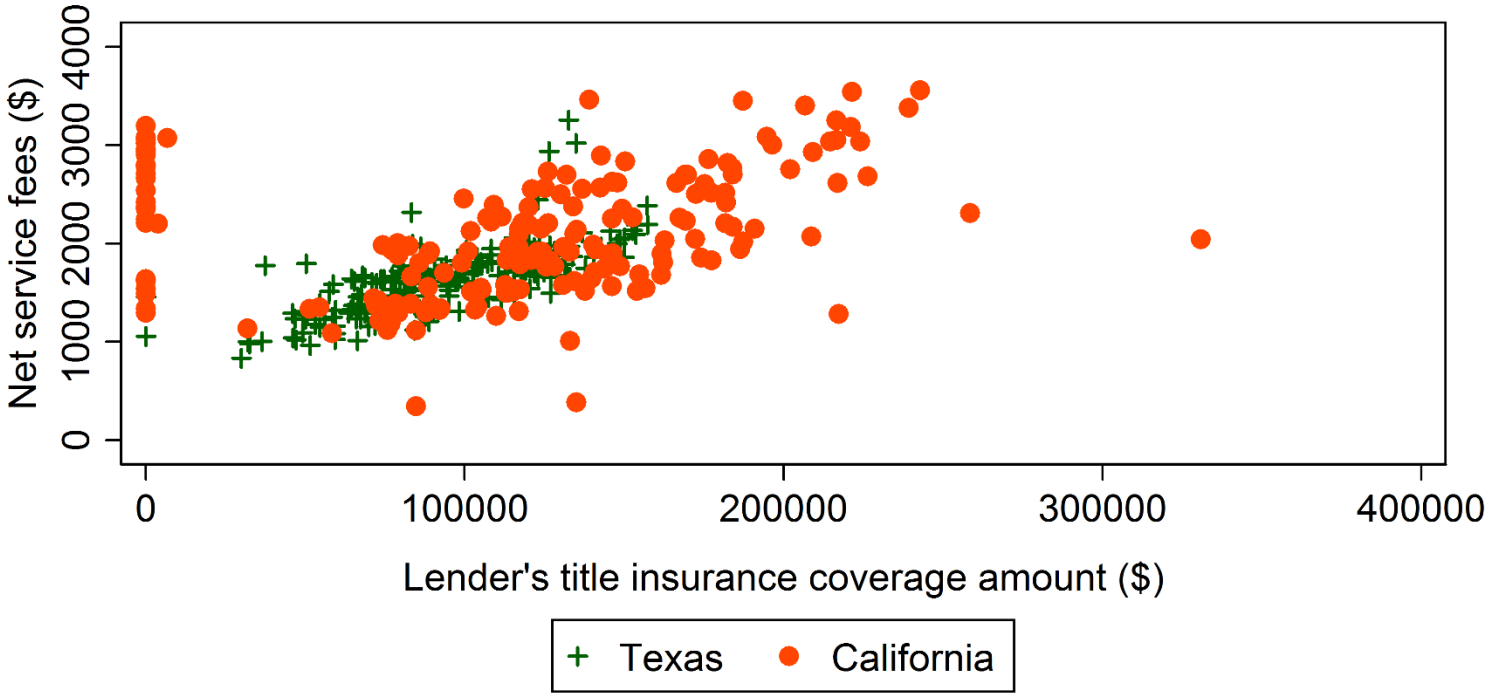
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.4 Comparison of Net Service Fees Between Texas and Arkansas



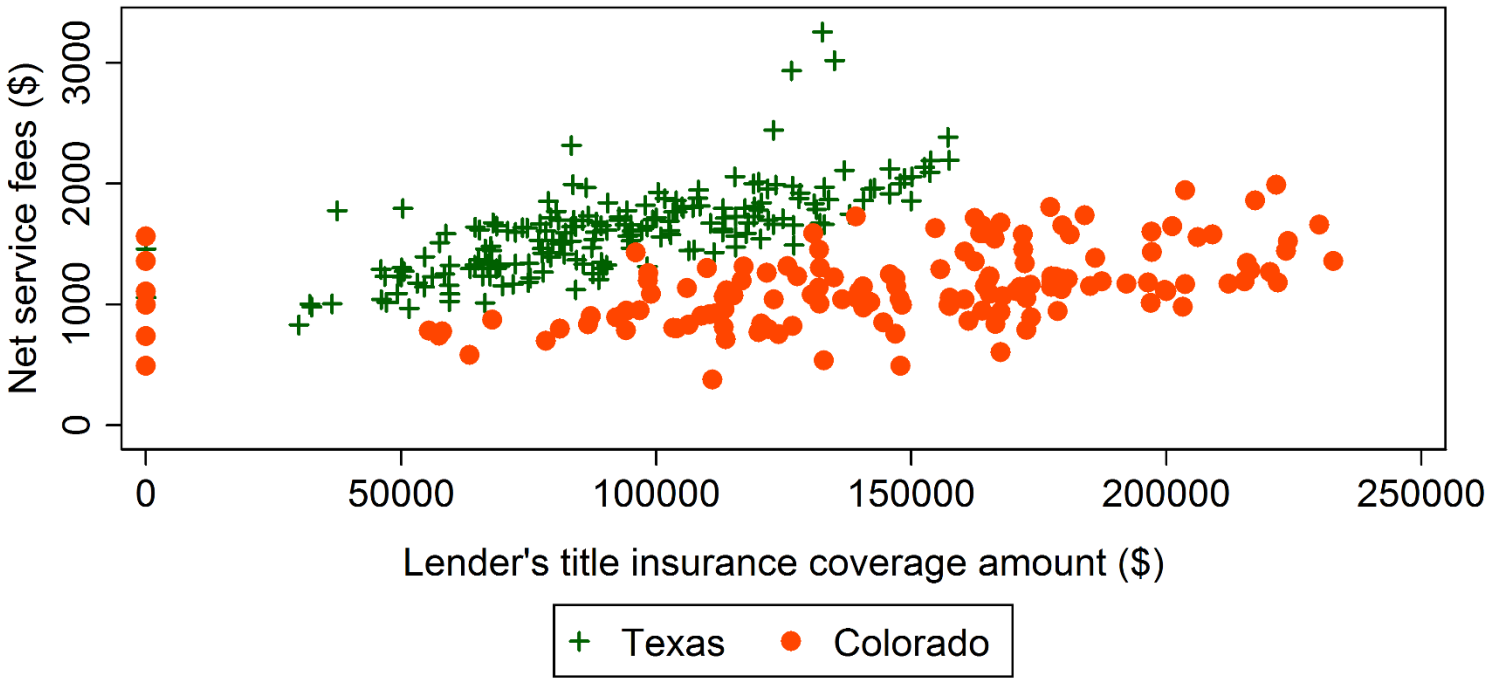
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.5 Comparison of Net Service Fees Between Texas and California



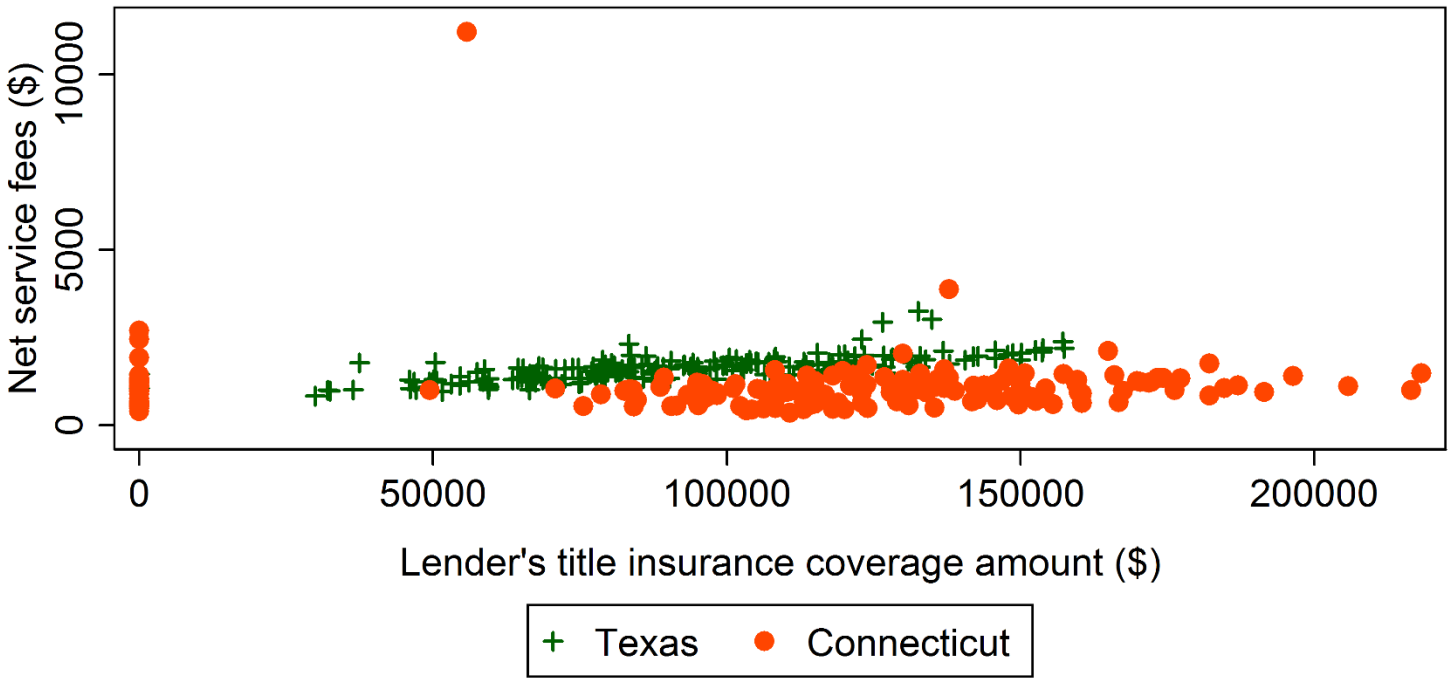
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.6 Comparison of Net Service Fees Between Texas and Colorado



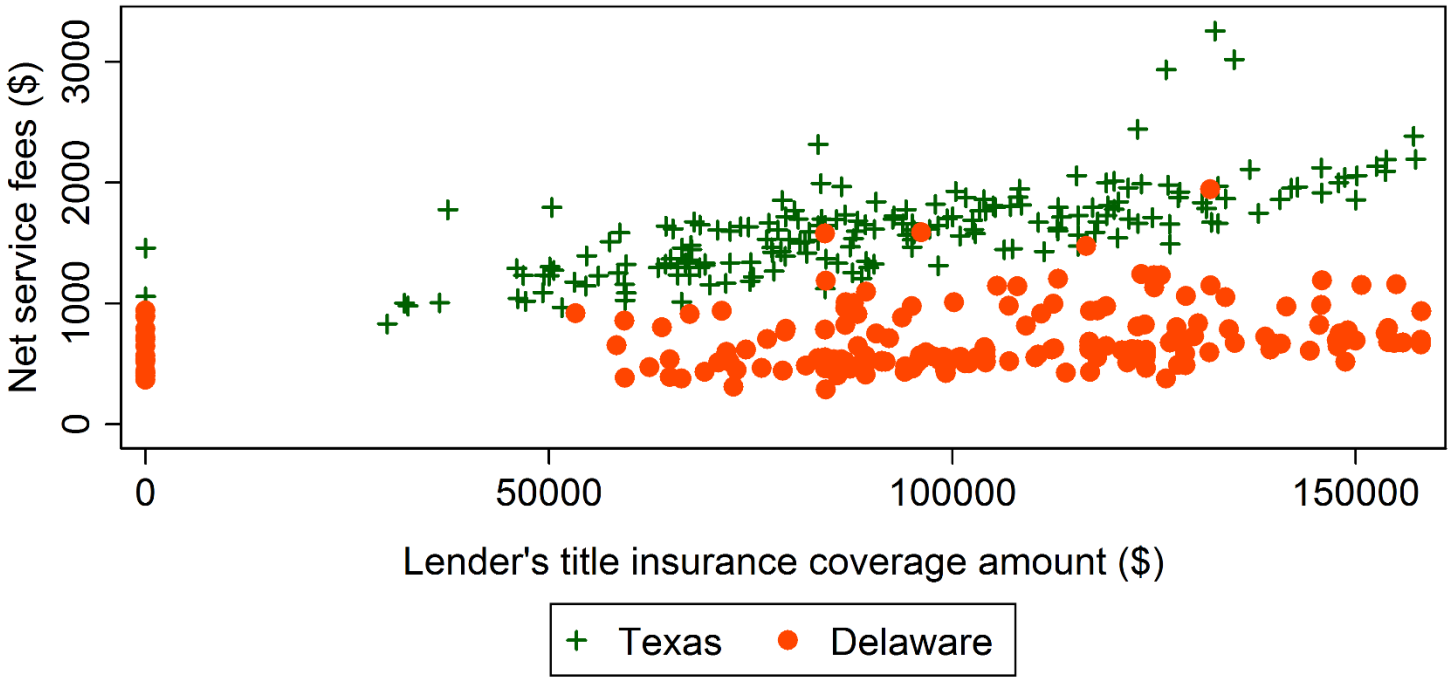
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.7 Comparison of Net Service Fees Between Texas and Connecticut



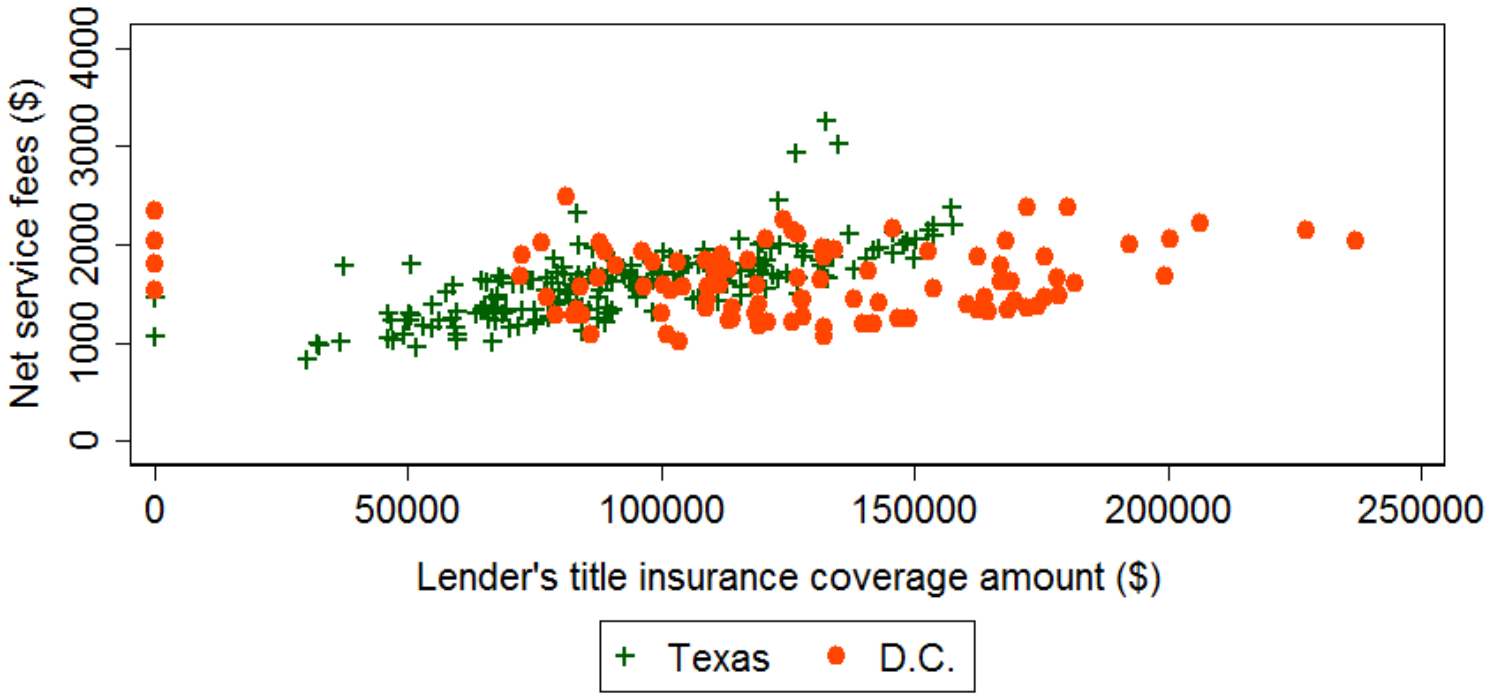
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.8 Comparison of Net Service Fees Between Texas and Delaware



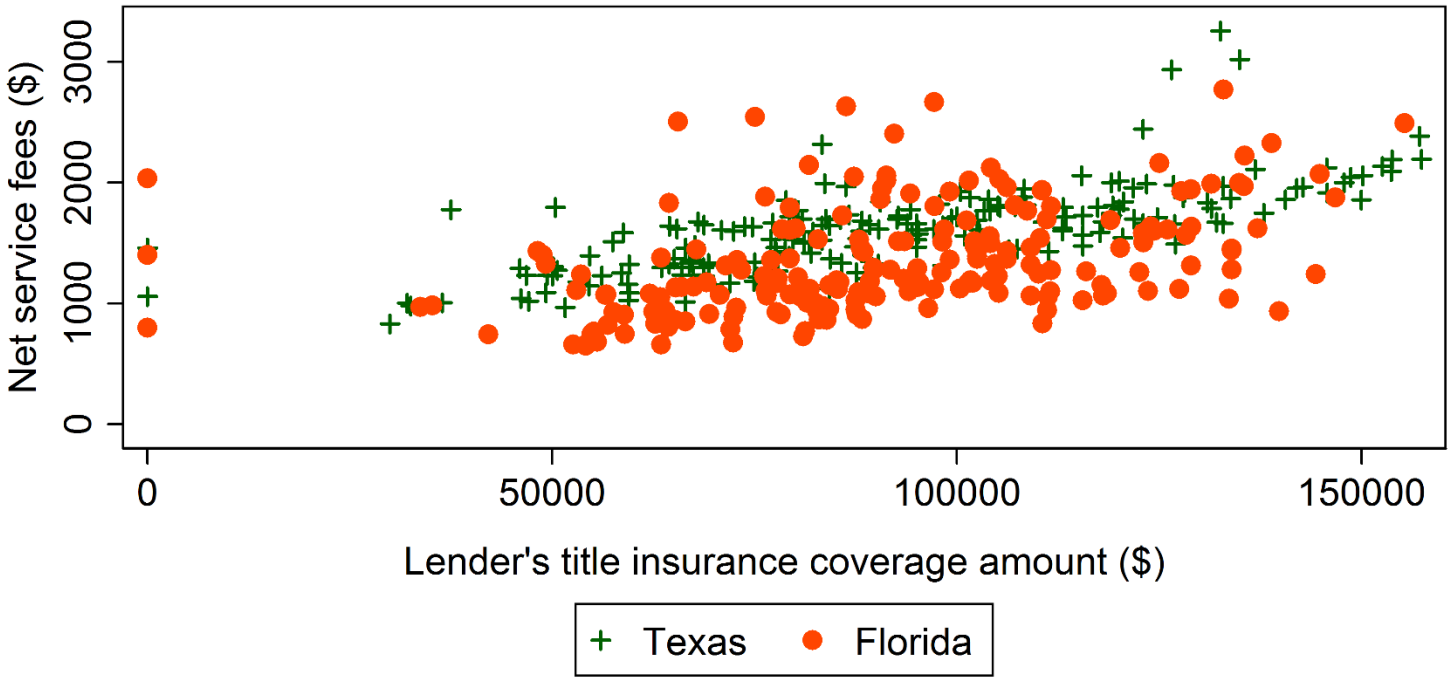
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.9 Comparison of Net Service Fees Between Texas and D.C.



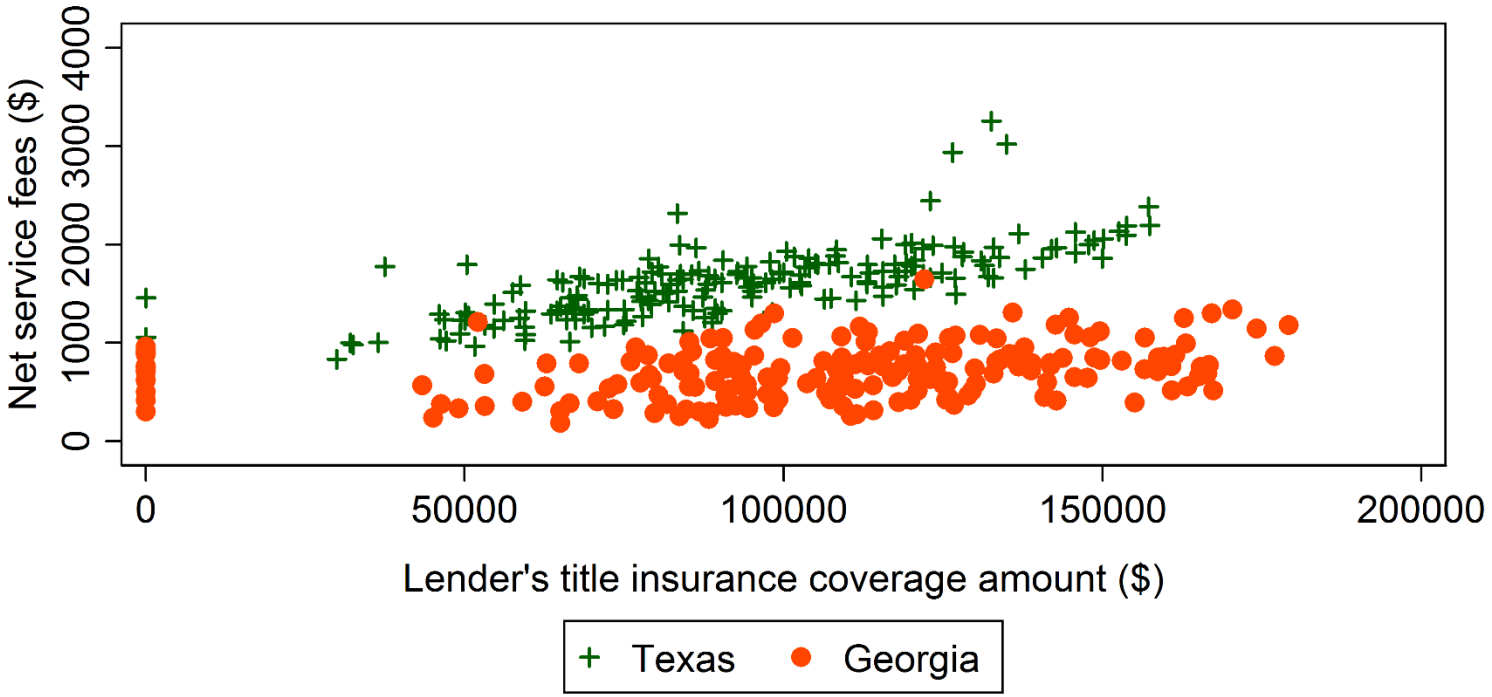
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.10 Comparison of Net Service Fees Between Texas and Florida



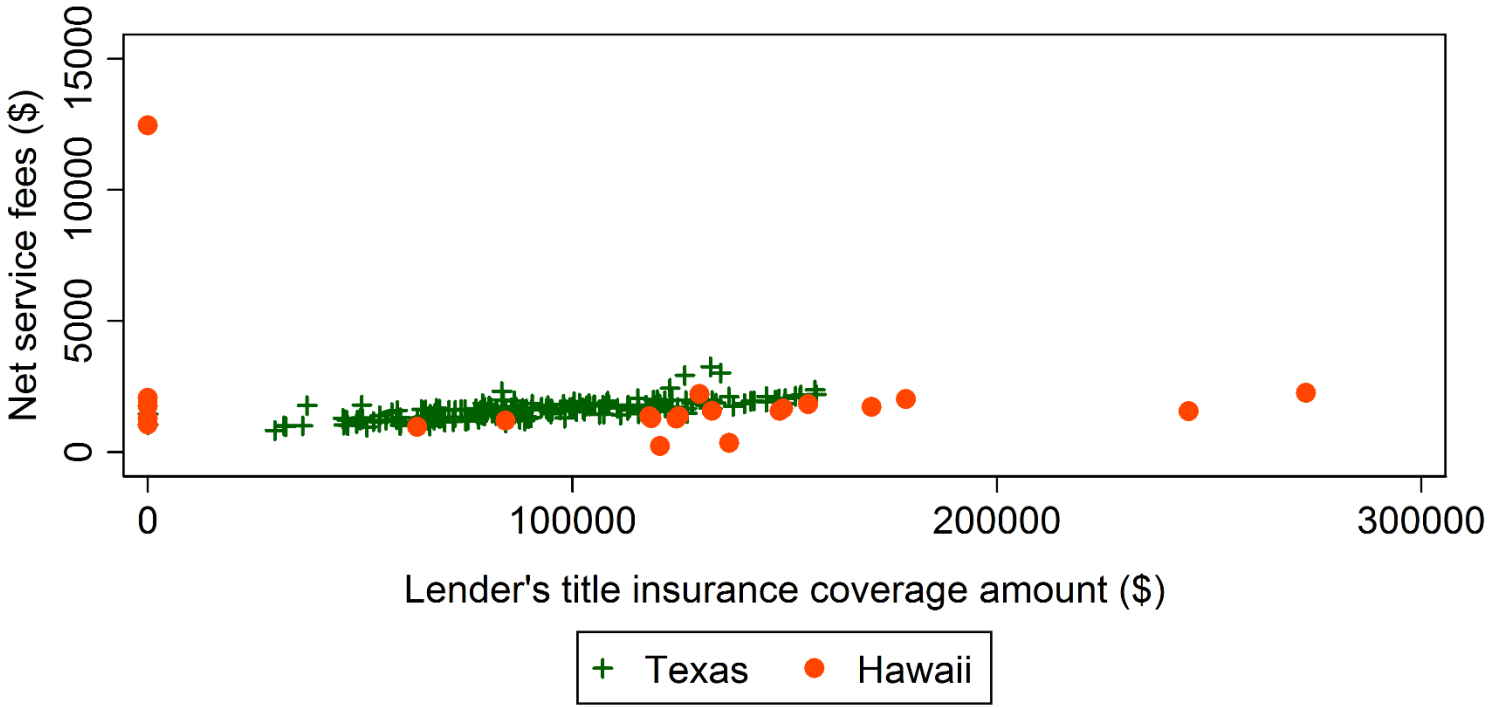
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.11 Comparison of Net Service Fees Between Texas and Georgia



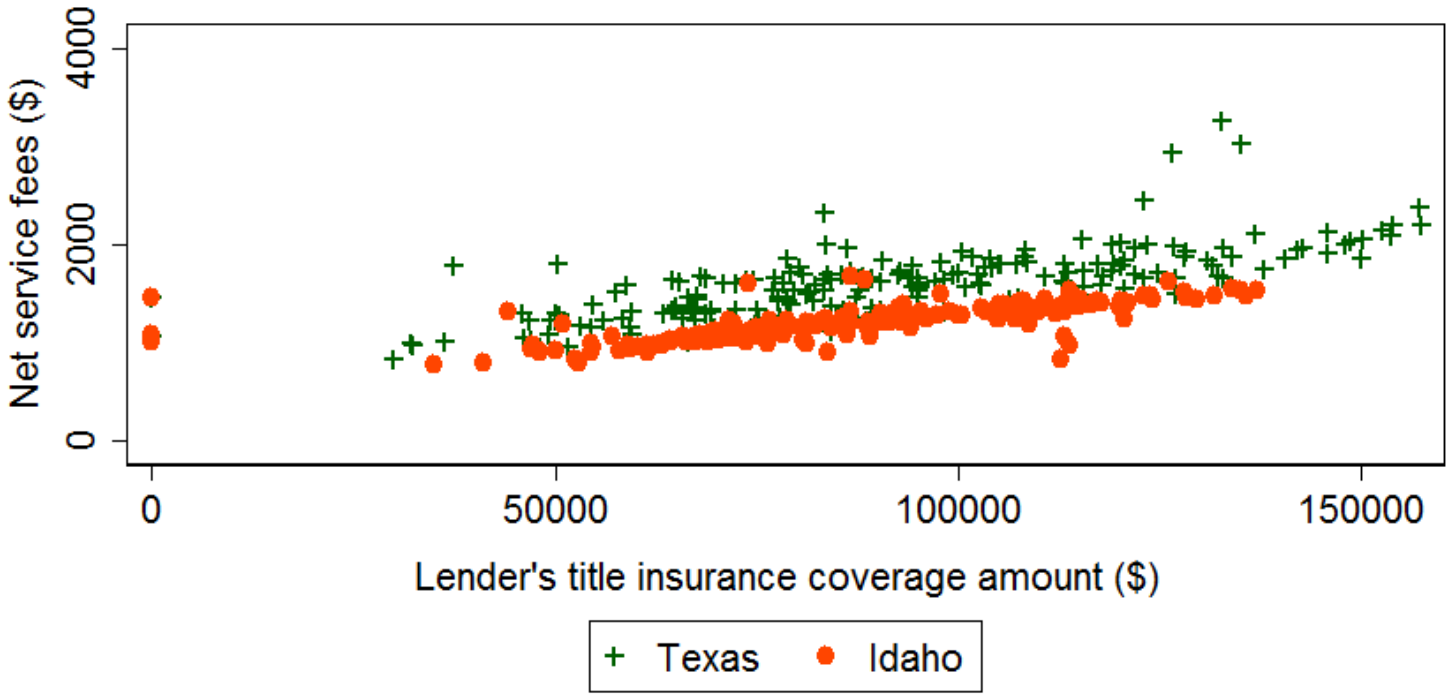
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.12 Comparison of Net Service Fees Between Texas and Hawaii



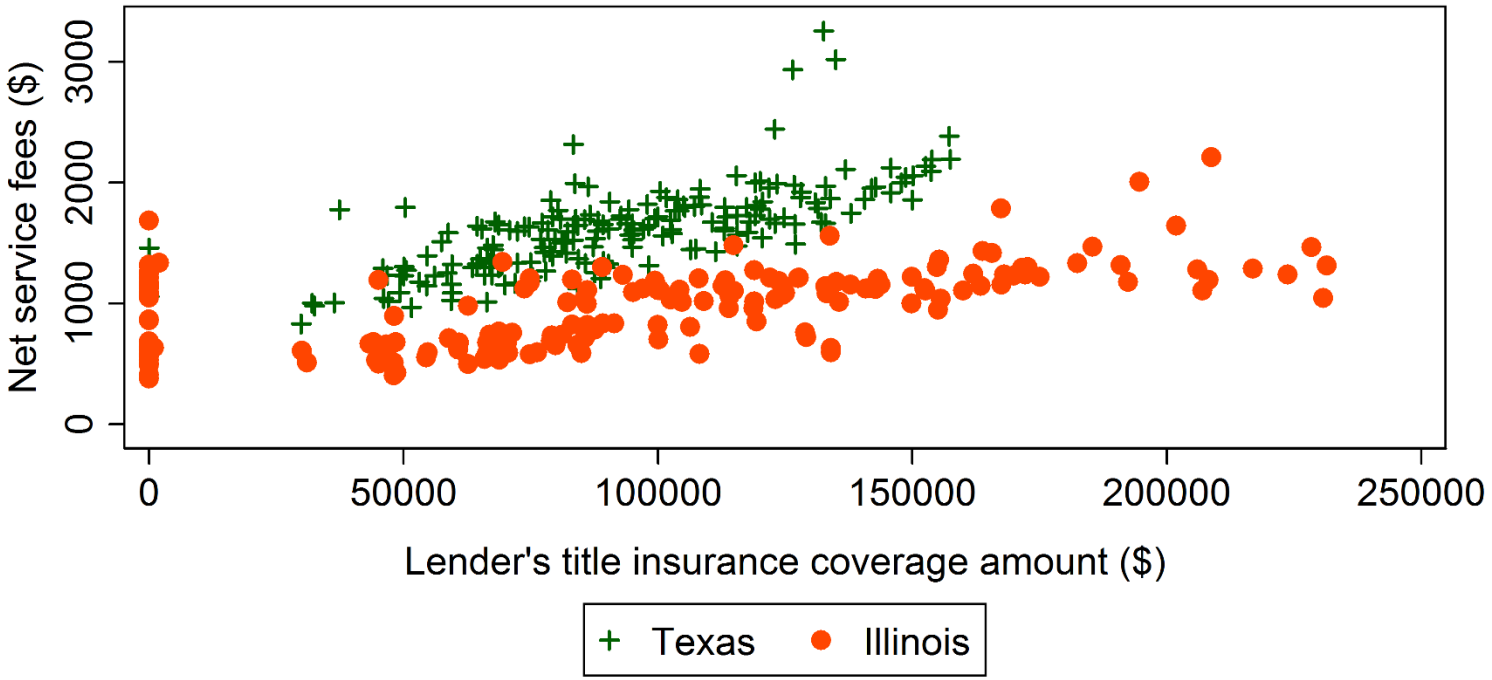
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.13 Comparison of Net Service Fees Between Texas and Idaho



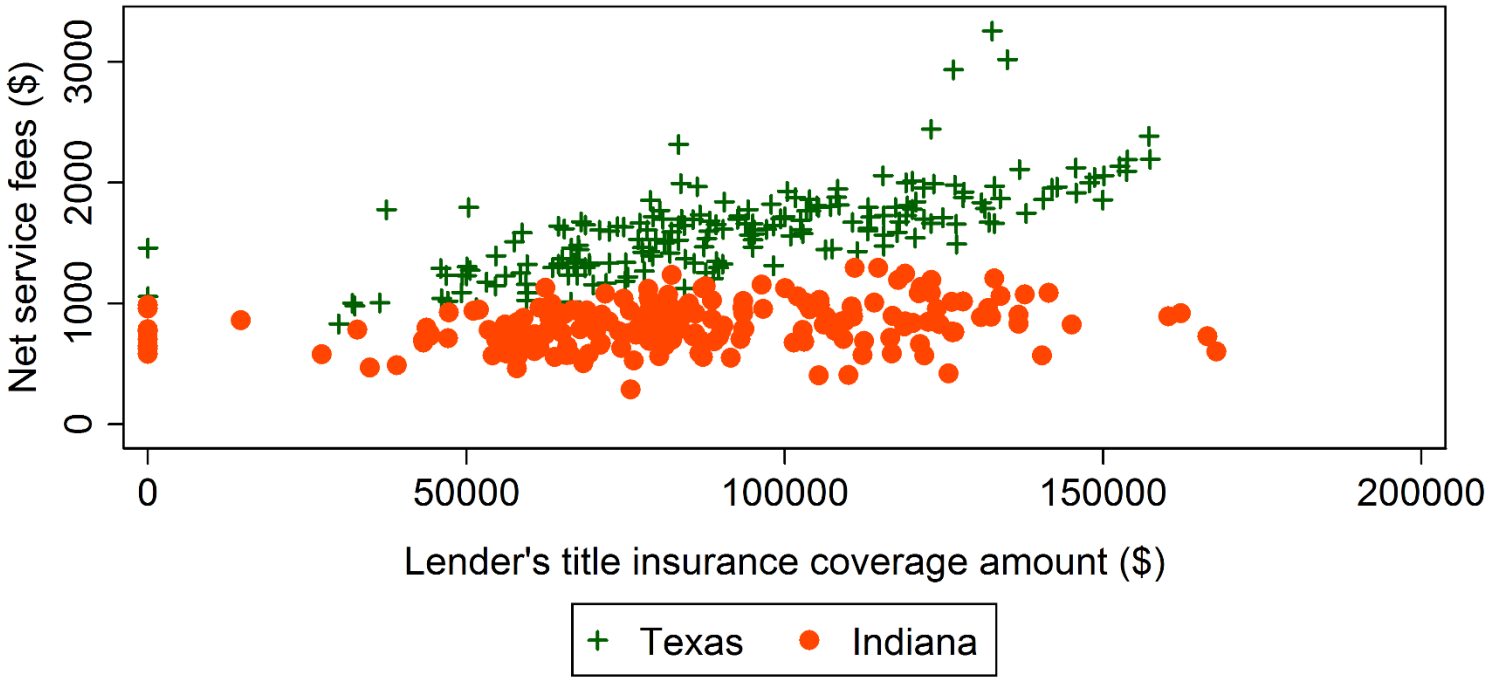
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.14 Comparison of Net Service Fees Between Texas and Illinois



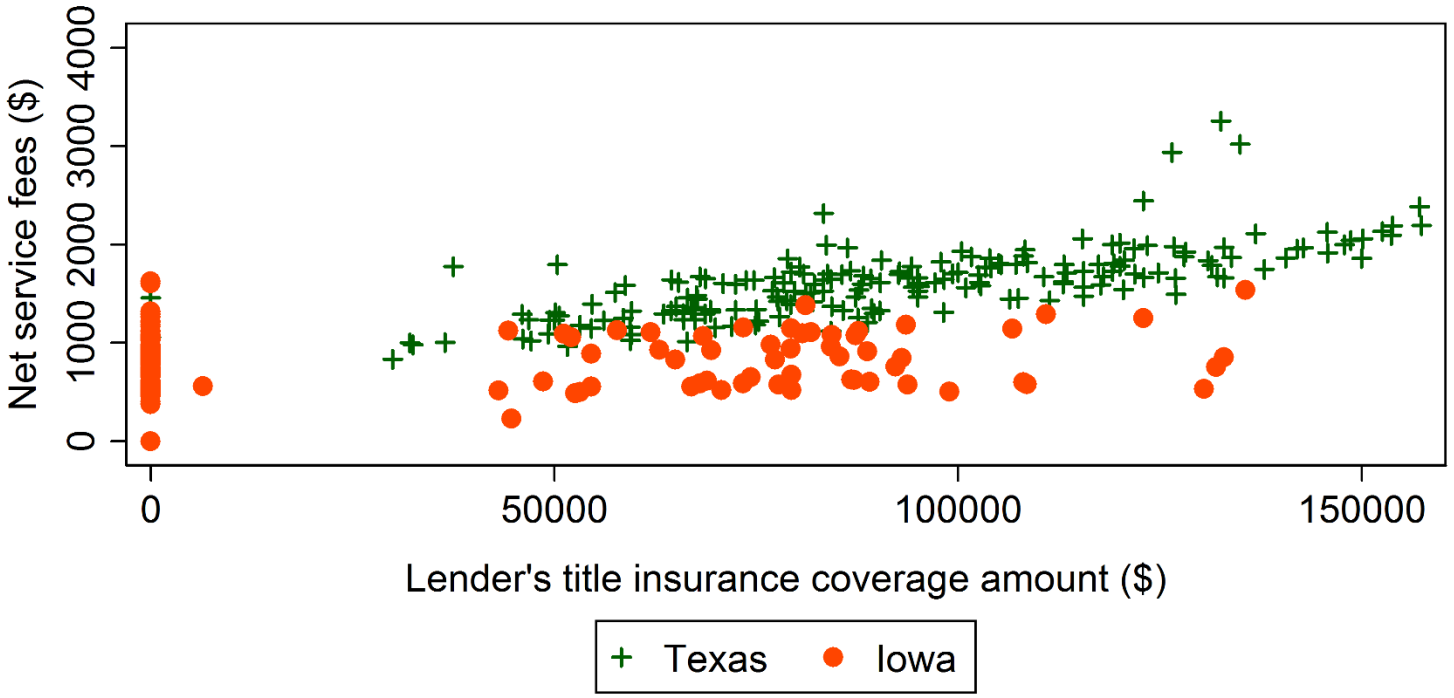
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.15 Comparison of Net Service Fees Between Texas and Indiana



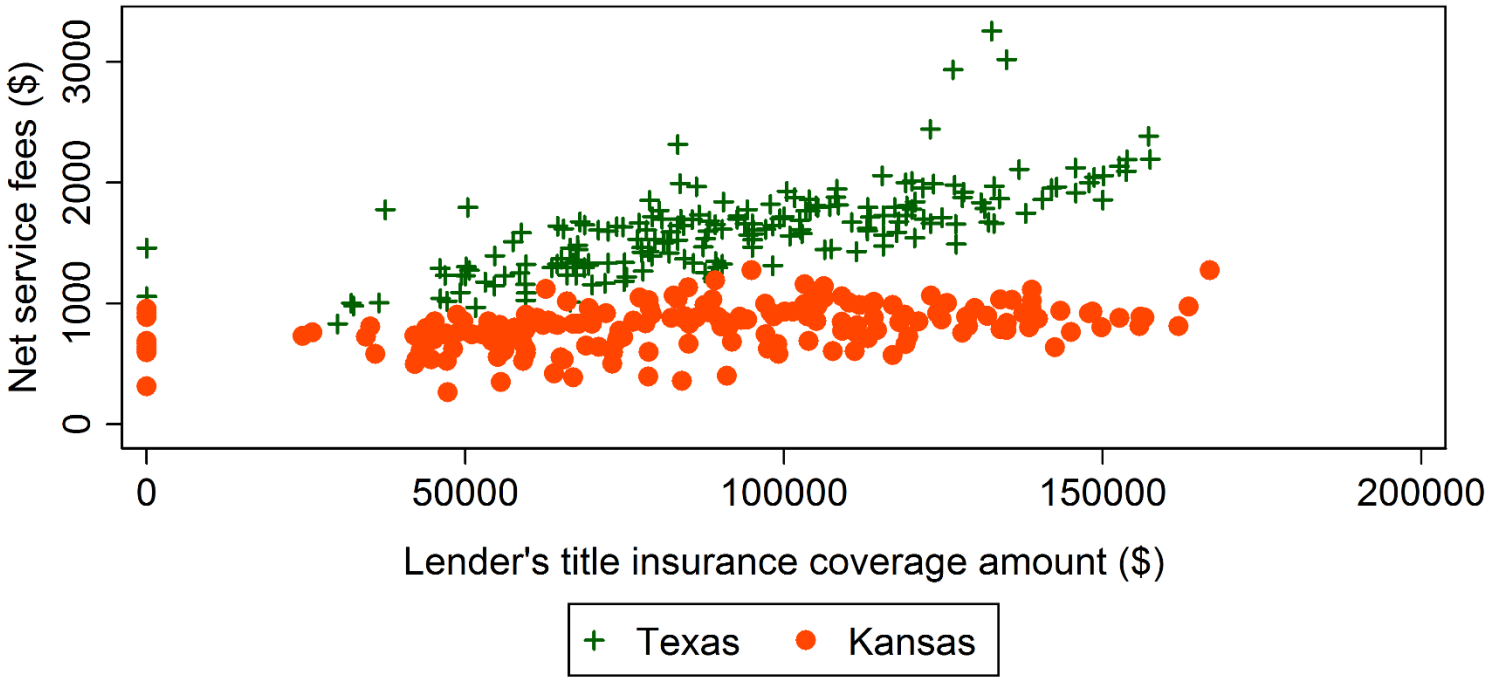
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.16 Comparison of Net Service Fees Between Texas and Iowa



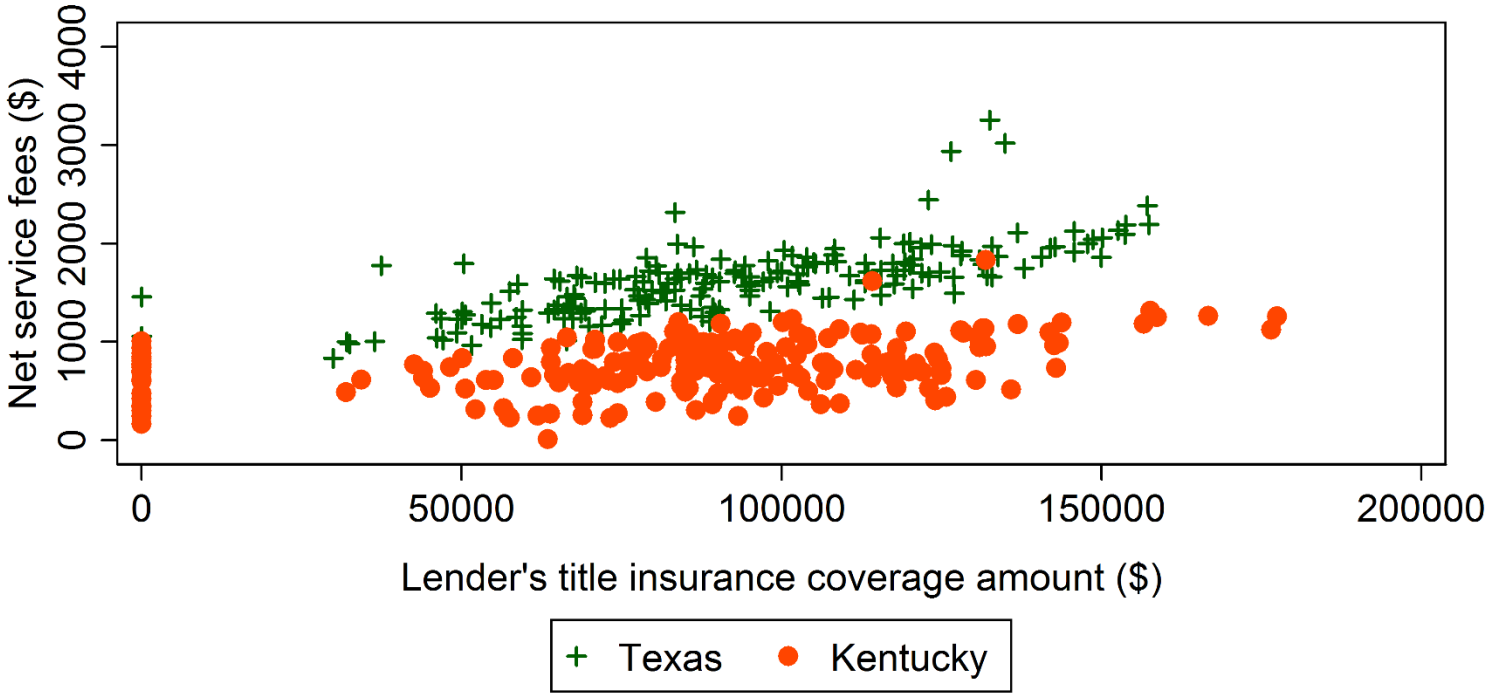
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.17 Comparison of Net Service Fees Between Texas and Kansas



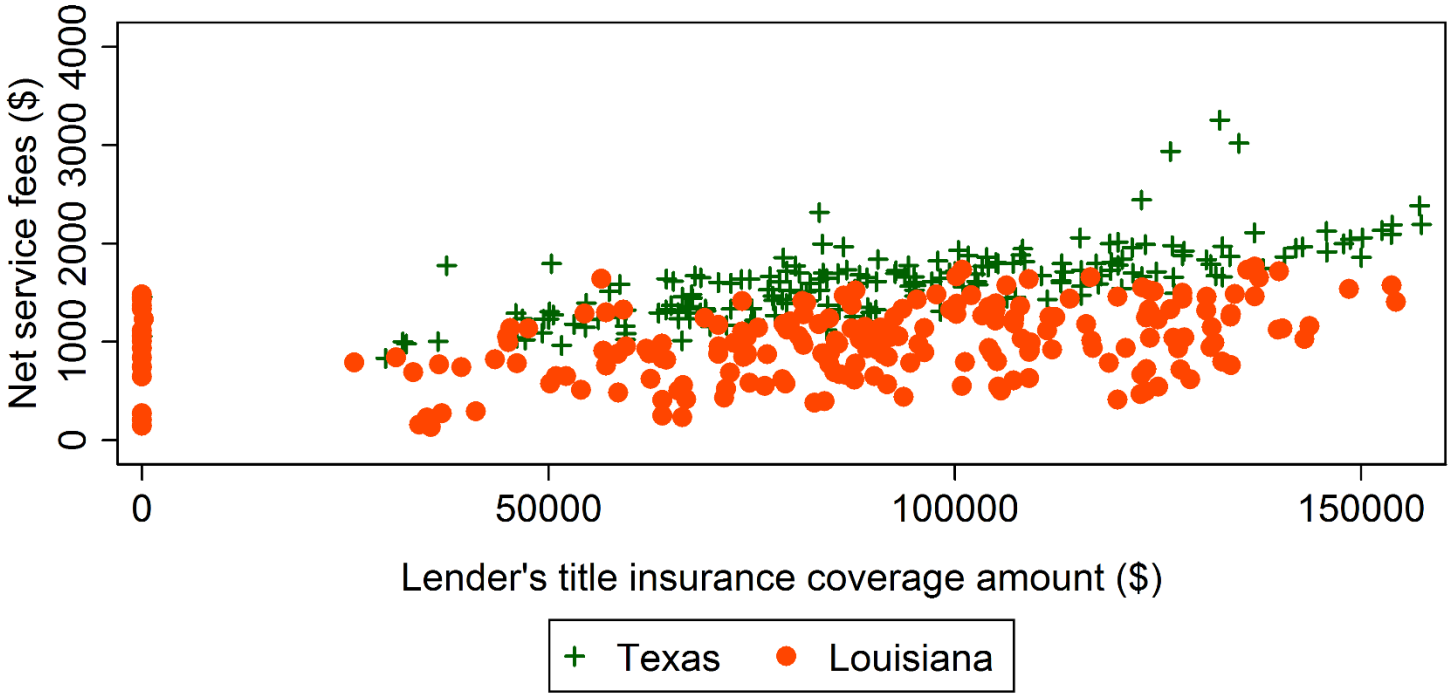
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.18 Comparison of Net Service Fees Between Texas and Kentucky



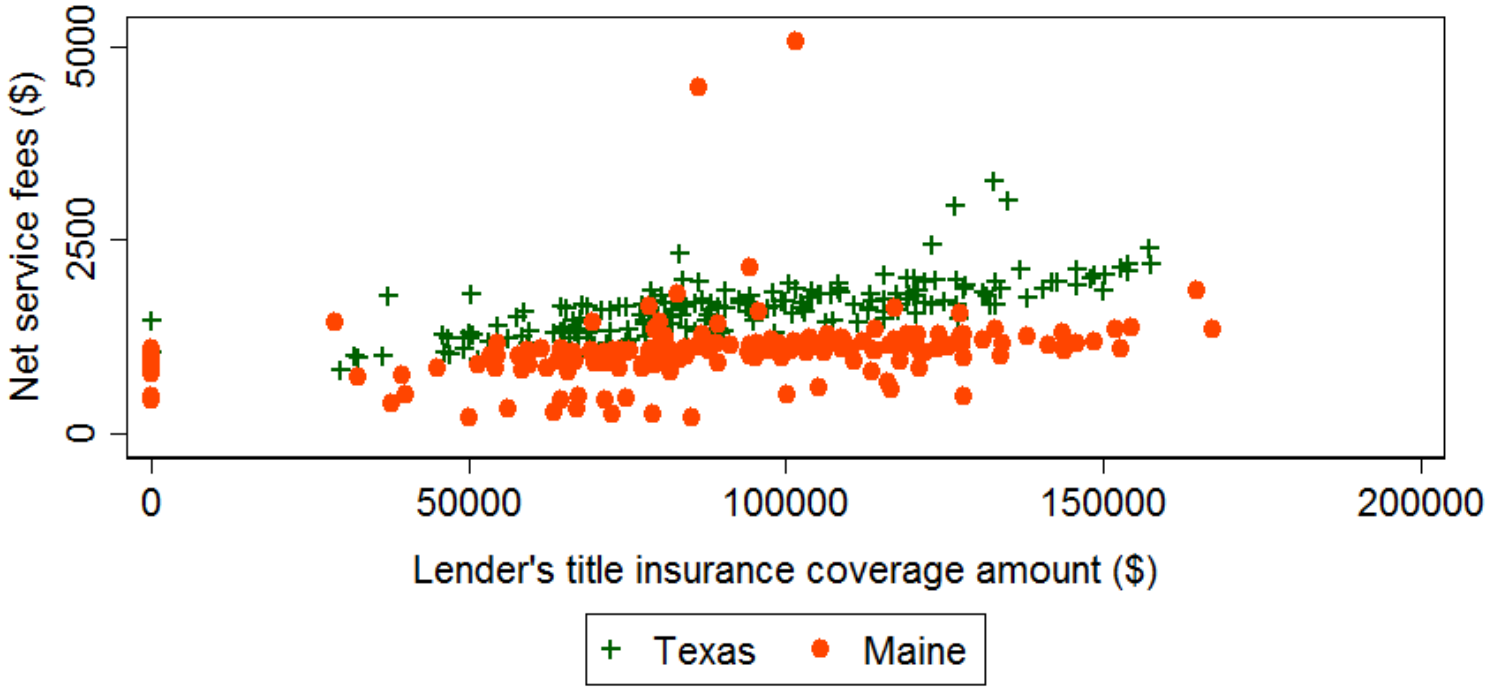
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.19 Comparison of Net Service Fees Between Texas and Louisiana



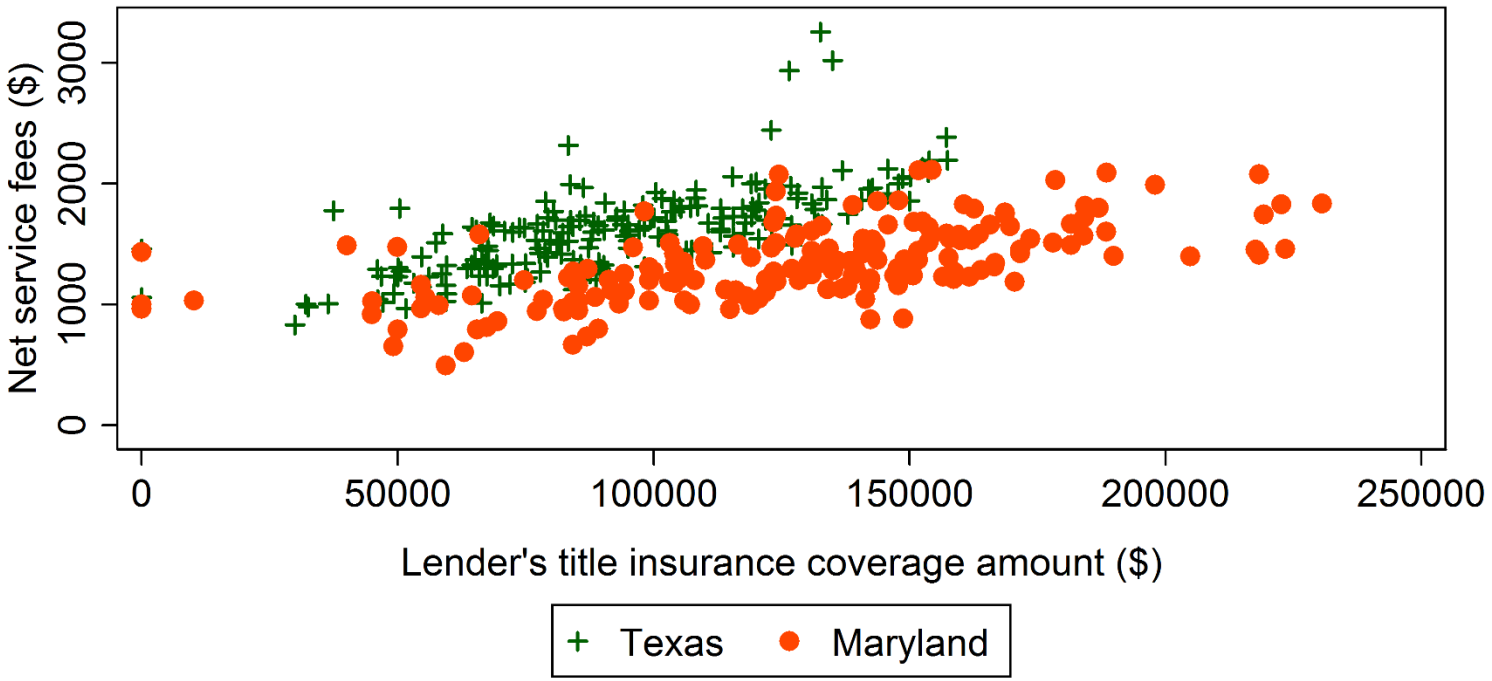
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.20 Comparison of Net Service Fees Between Texas and Maine



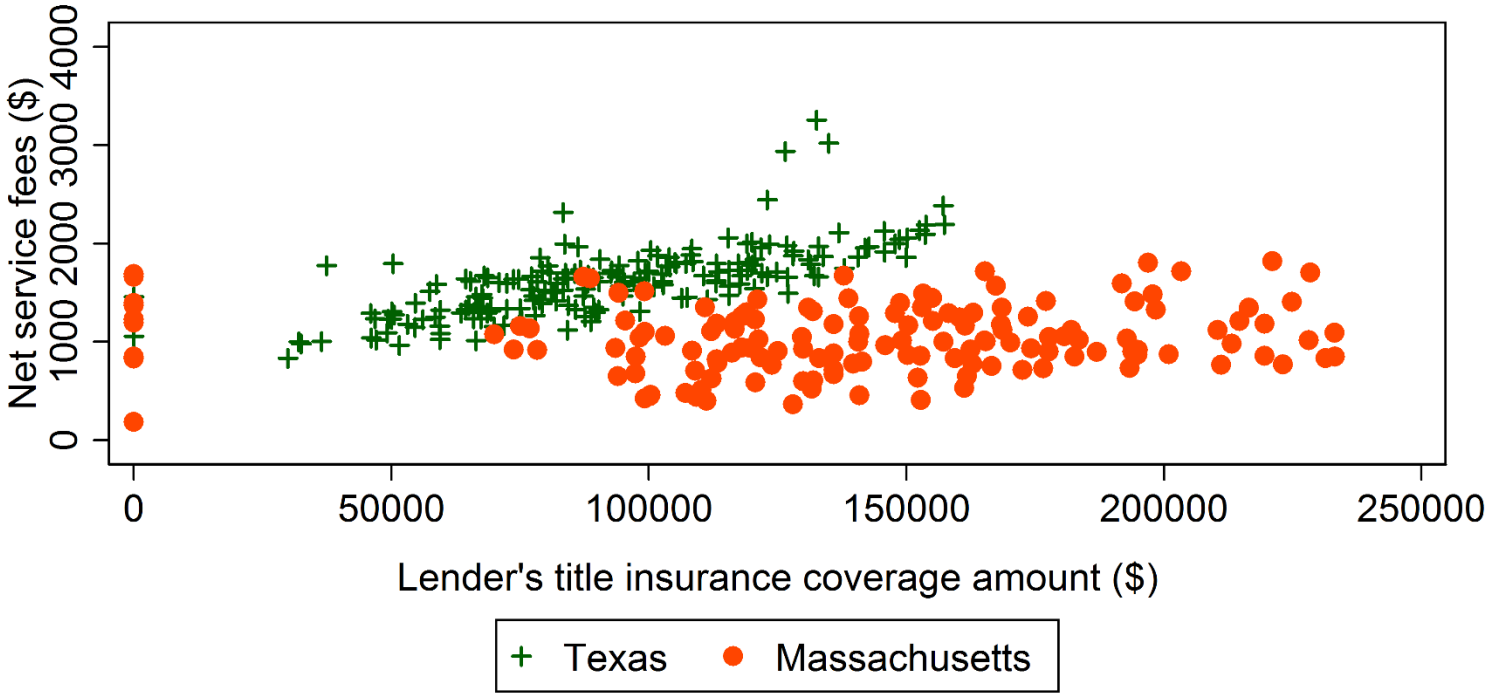
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.21 Comparison of Net Service Fees Between Texas and Maryland



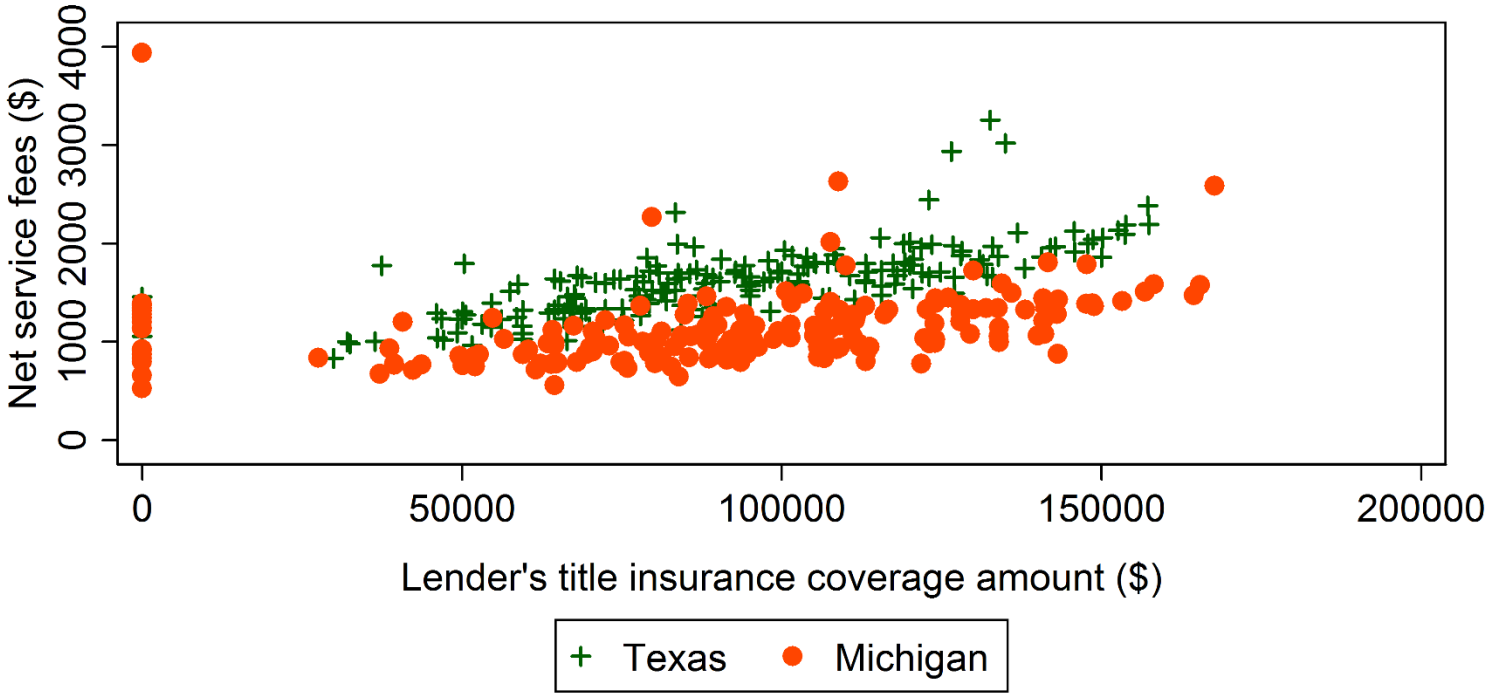
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.22 Comparison of Net Service Fees Between Texas and Massachusett



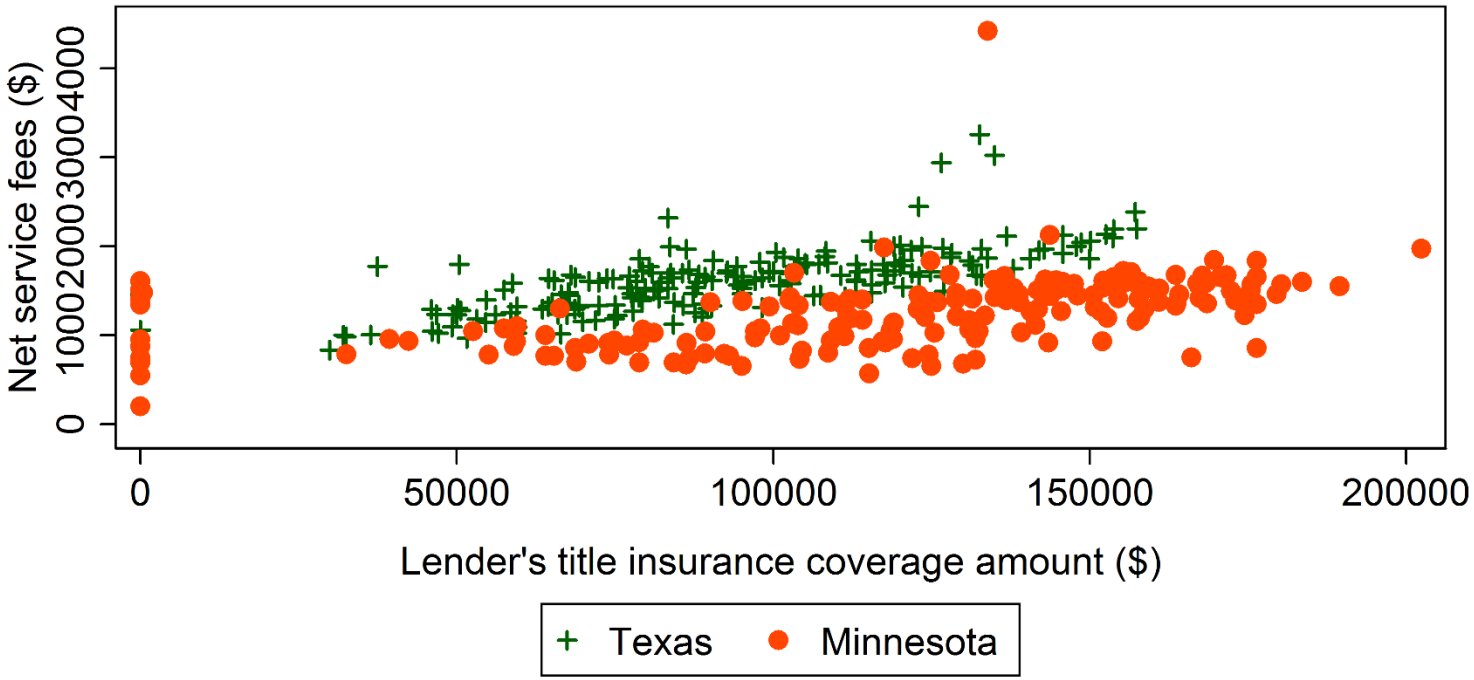
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.23 Comparison of Net Service Fees Between Texas and Michigan



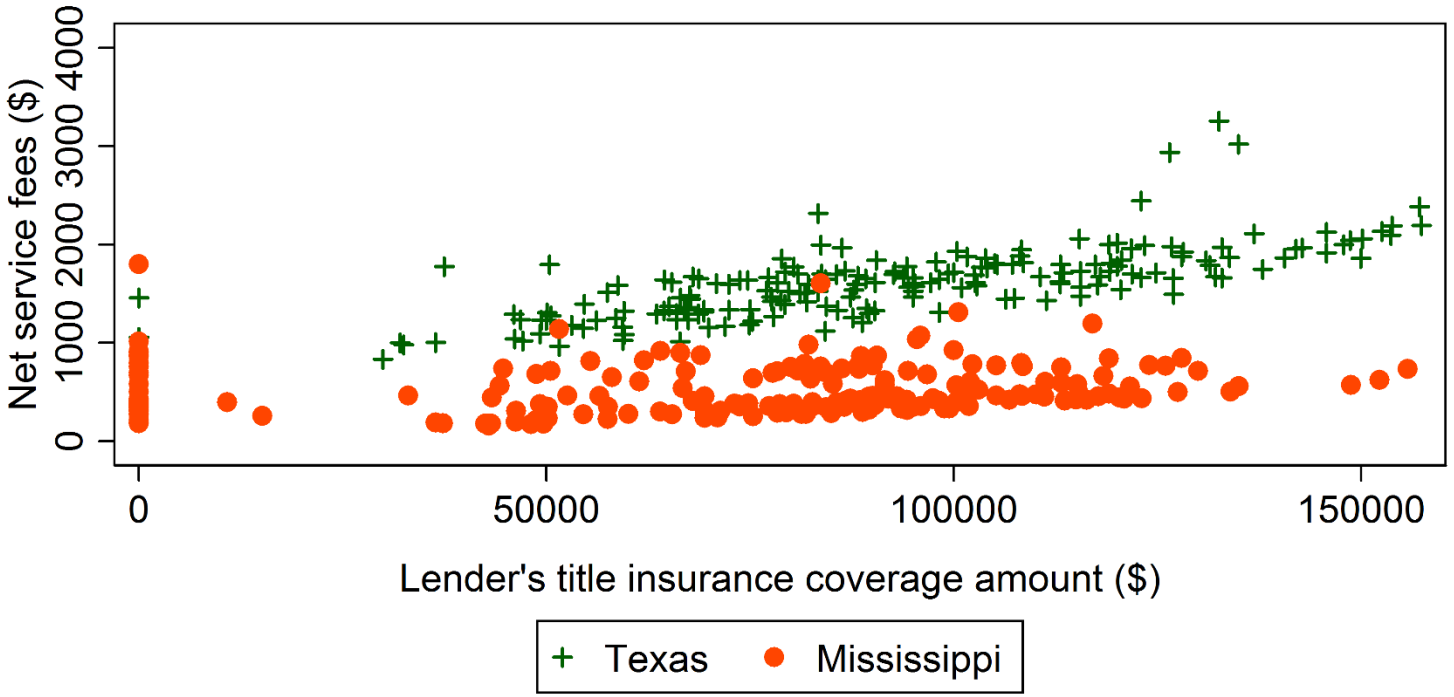
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.24 Comparison of Net Service Fees Between Texas and Minnesota



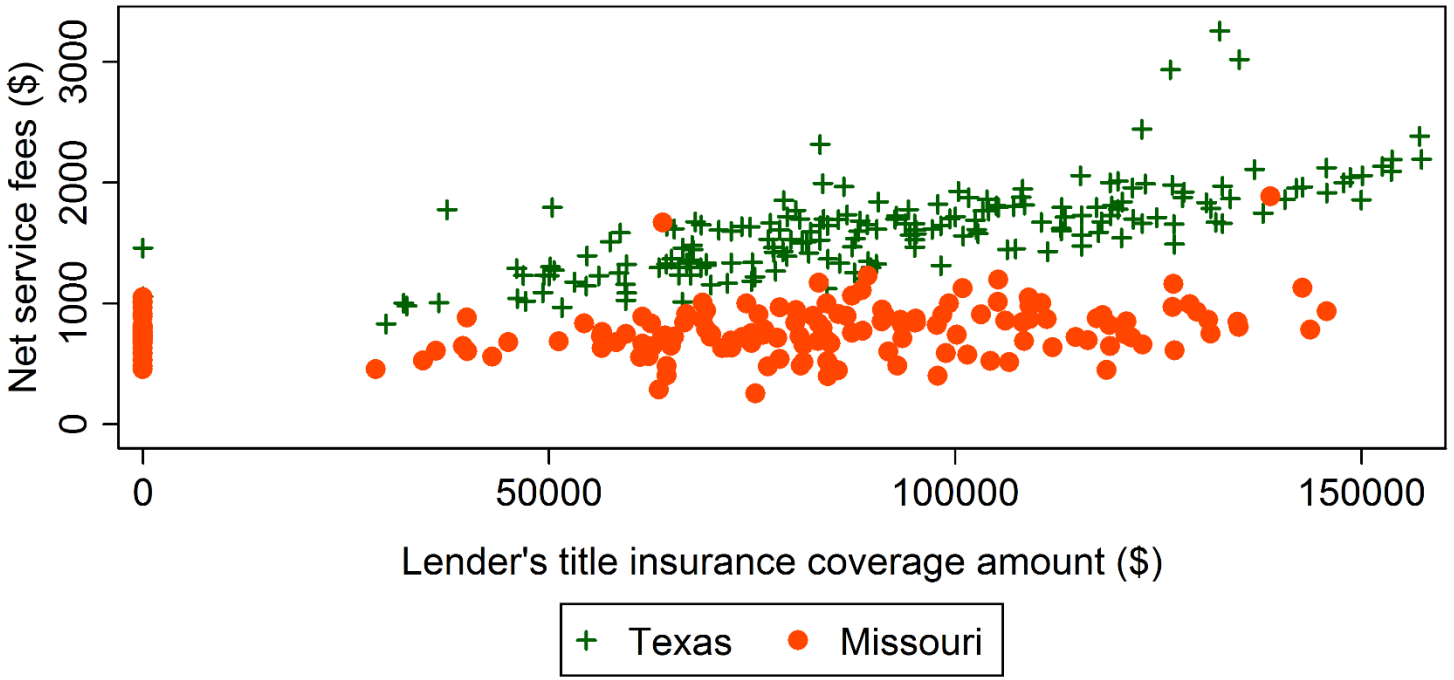
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.25 Comparison of Net Service Fees Between Texas and Mississippi



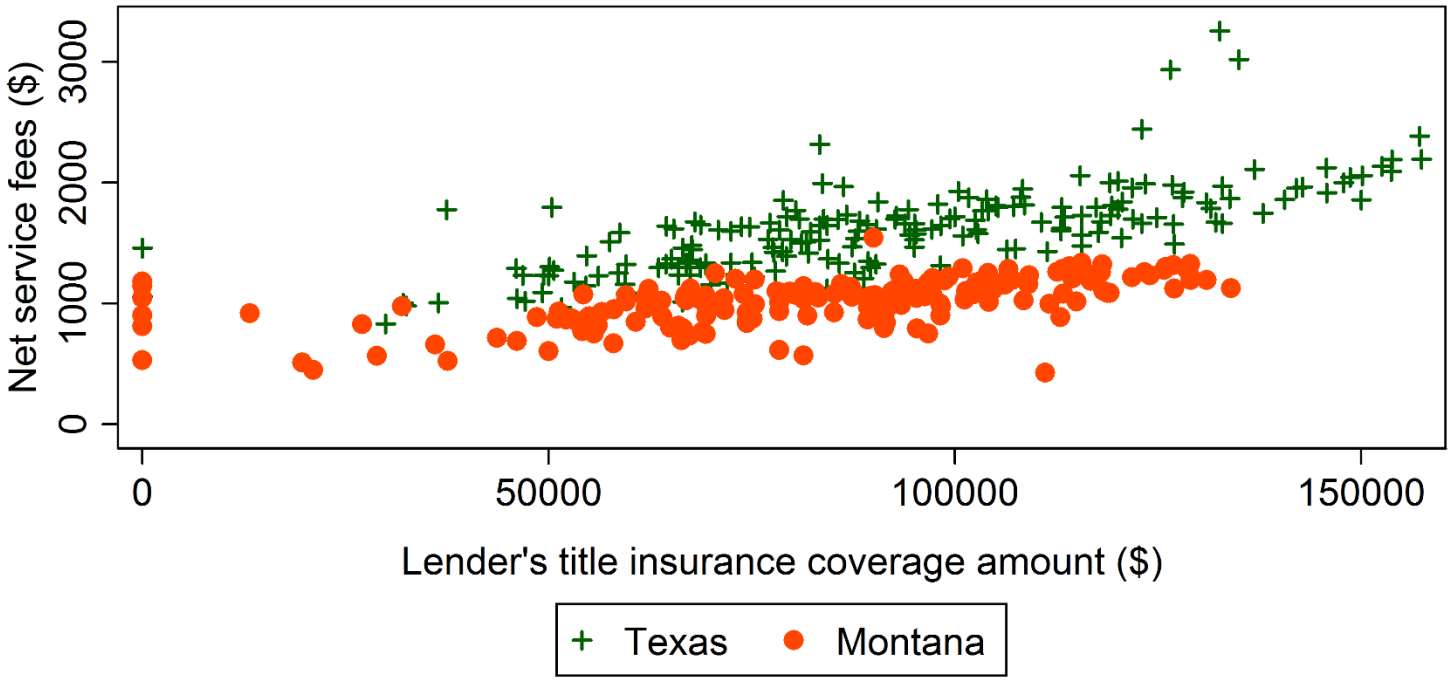
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.26 Comparison of Net Service Fees Between Texas and Missouri



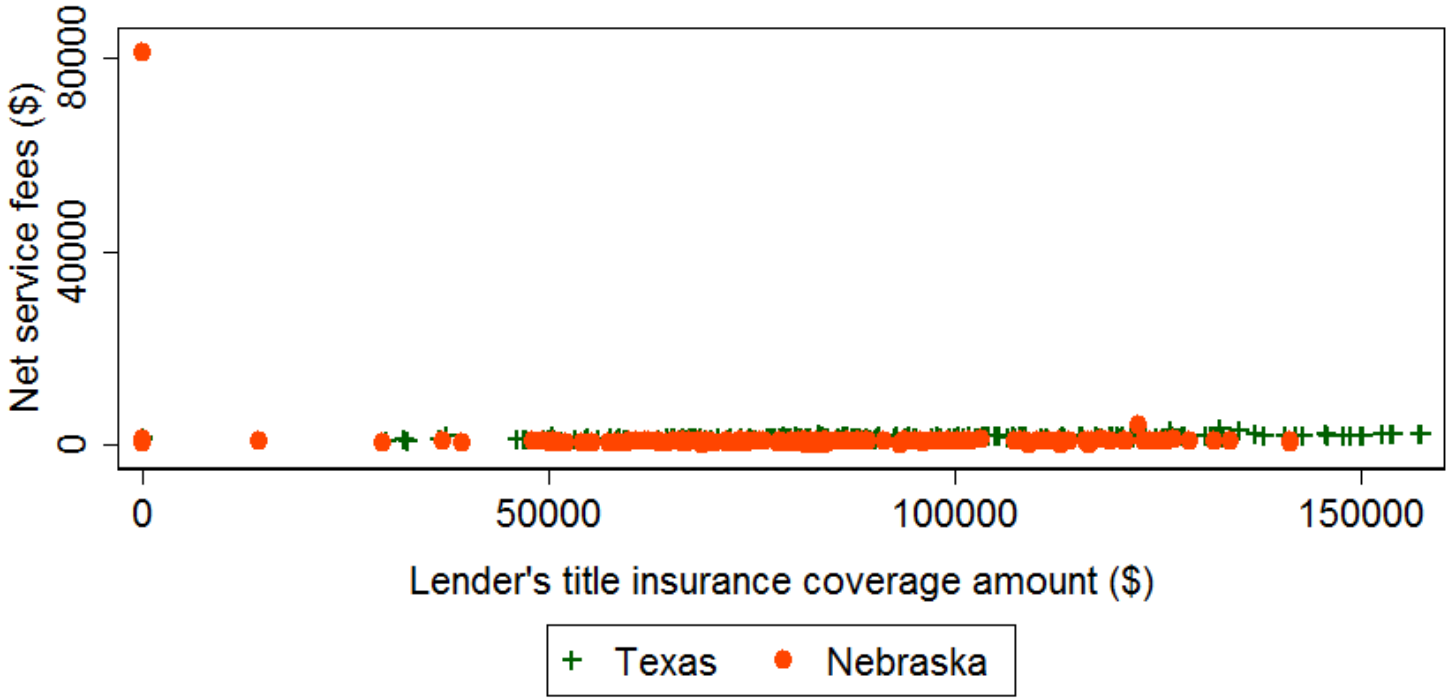
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.27 Comparison of Net Service Fees Between Texas and Montana



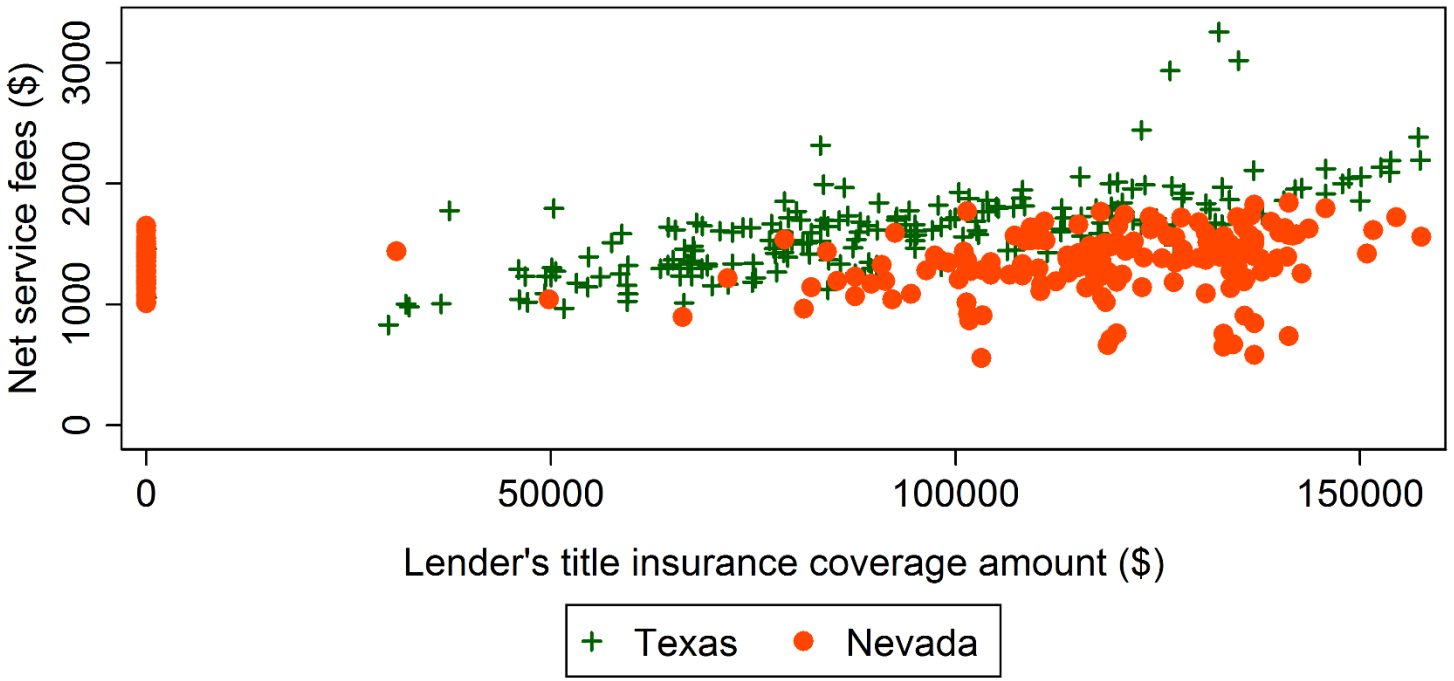
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.28 Comparison of Net Service Fees Between Texas and Nebraska



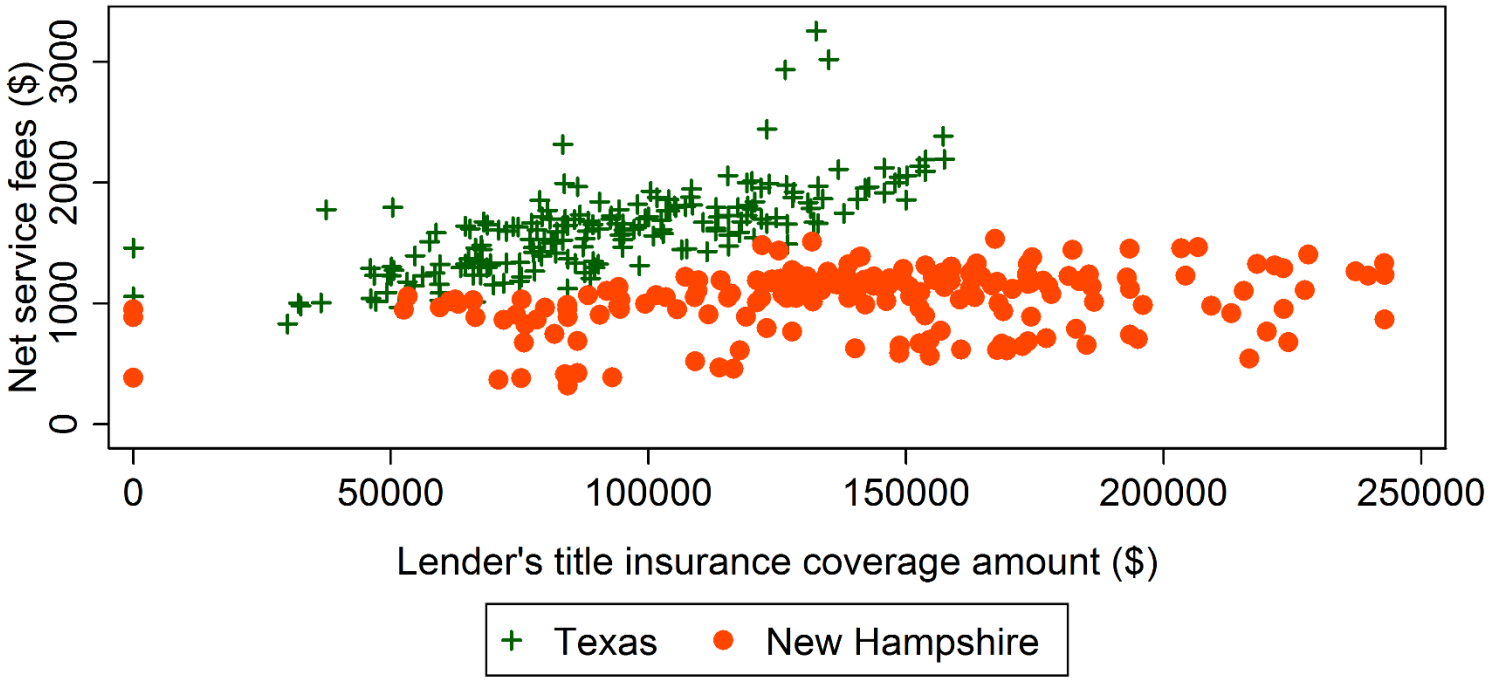
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.29 Comparison of Net Service Fees Between Texas and Nevada



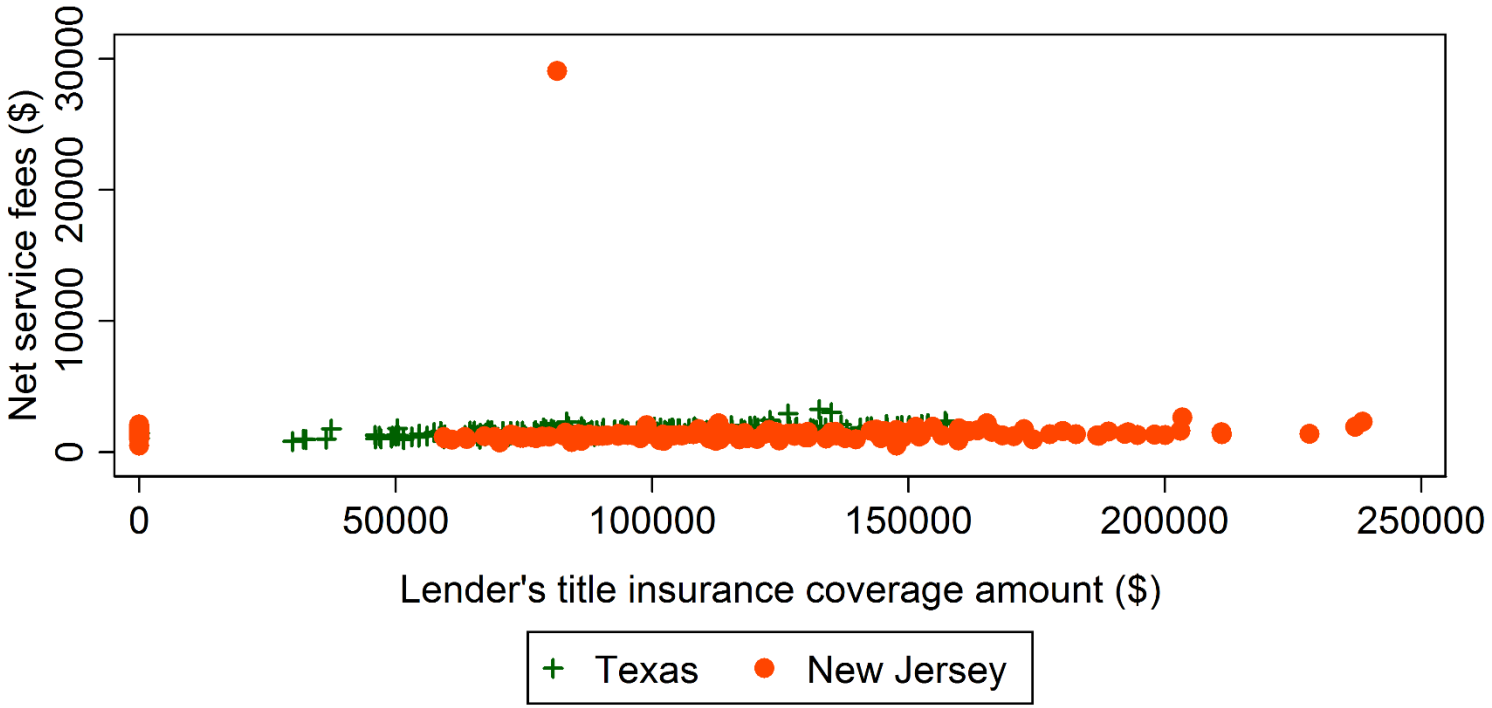
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.30 Comparison of Net Service Fees Between Texas and New Hampshi



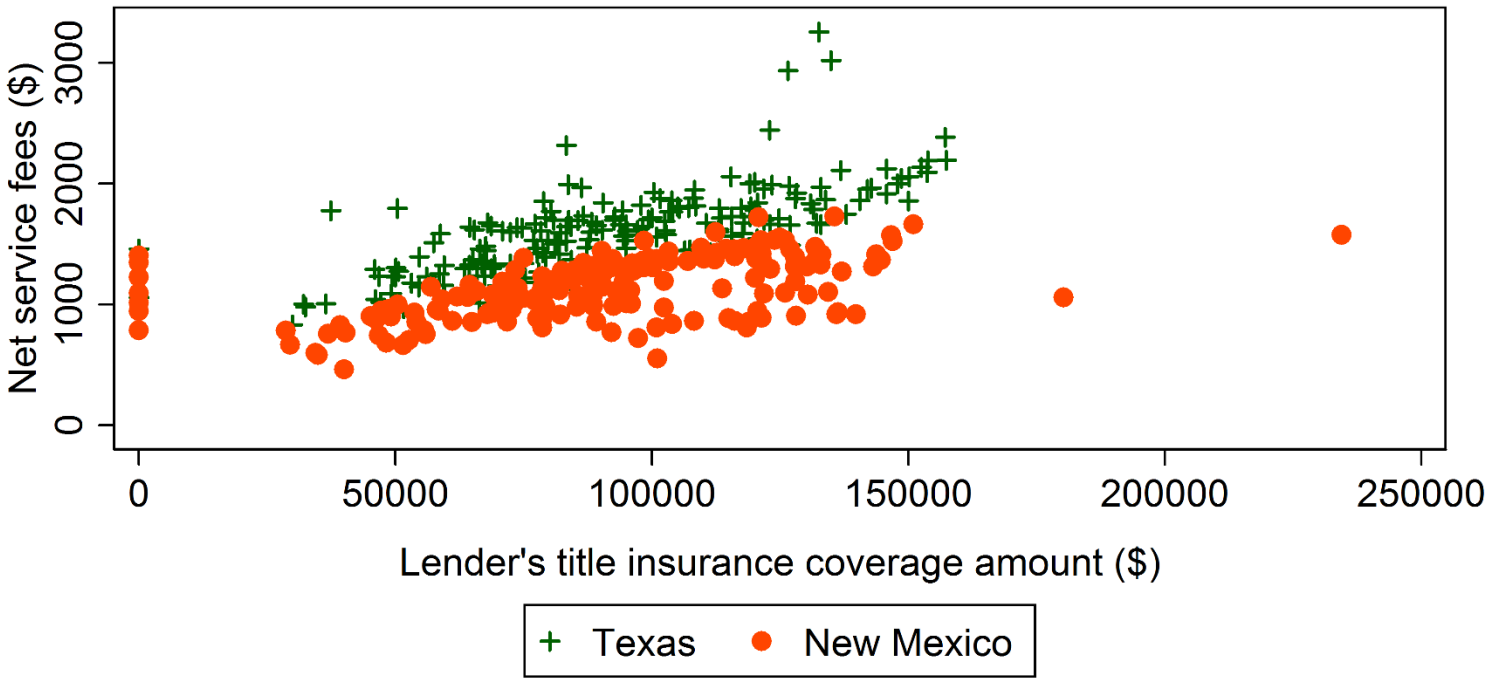
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.31 Comparison of Net Service Fees Between Texas and New Jersey



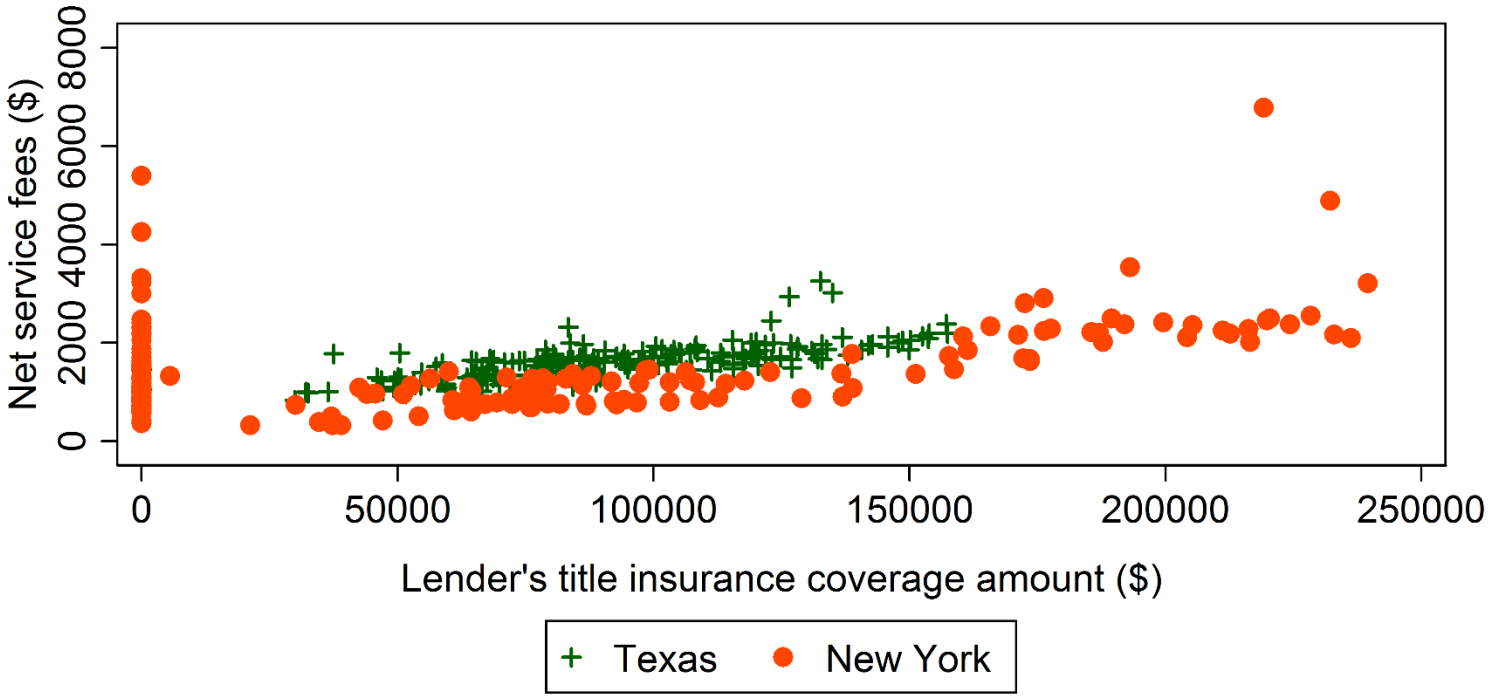
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.32 Comparison of Net Service Fees Between Texas and New Mexicc



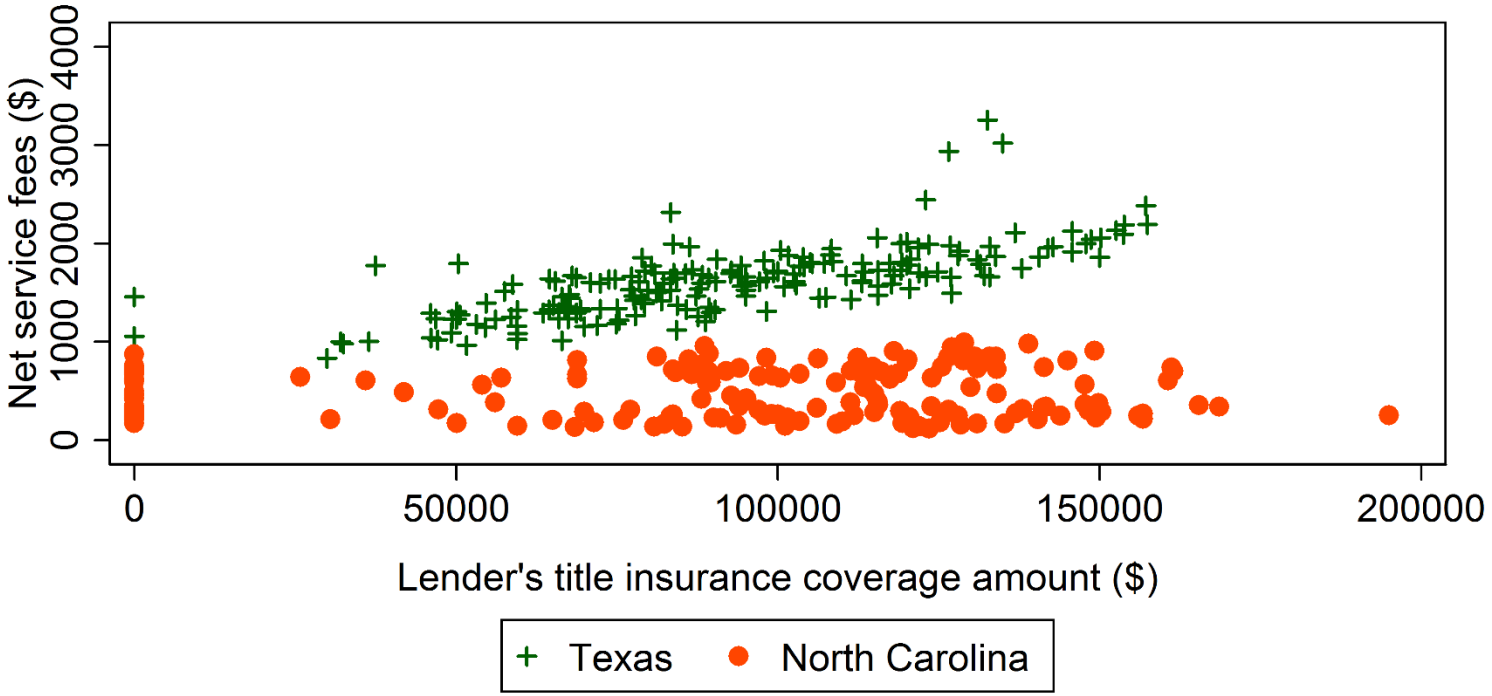
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.33 Comparison of Net Service Fees Between Texas and New York



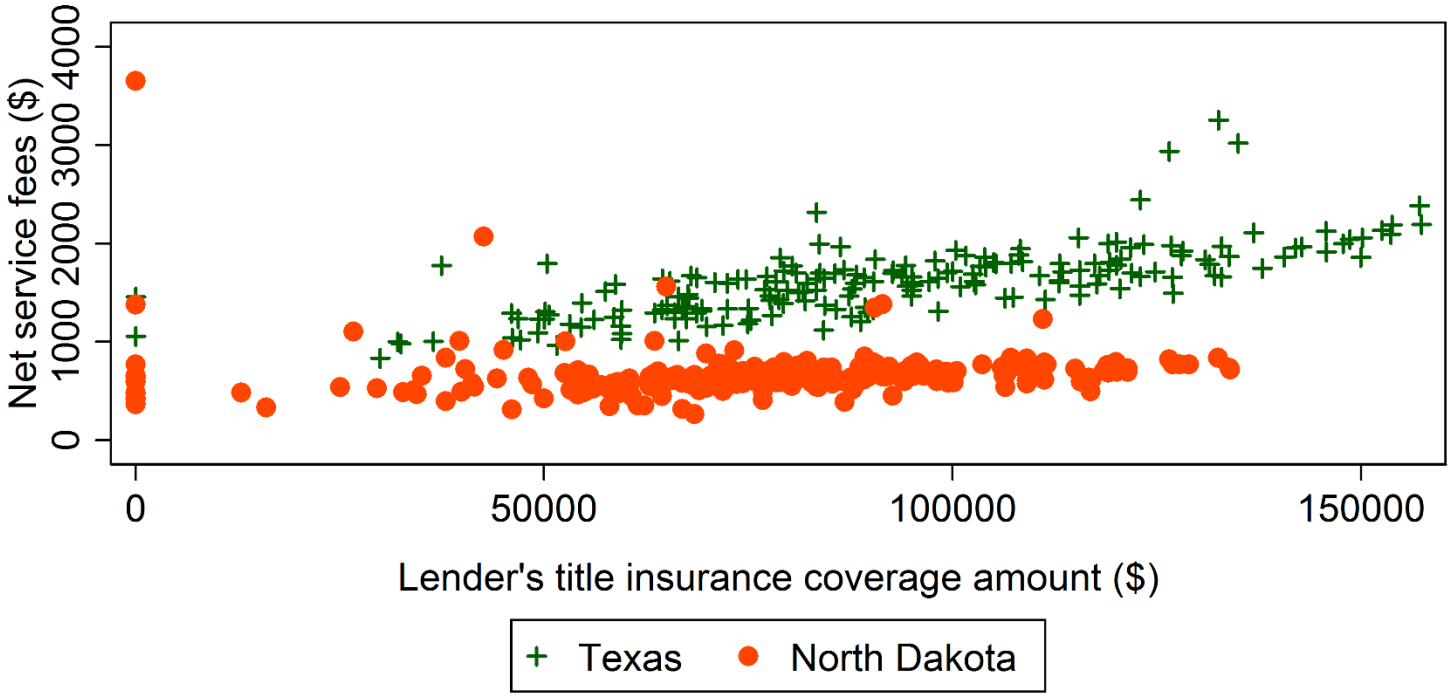
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.34 Comparison of Net Service Fees Between Texas and North Carolina



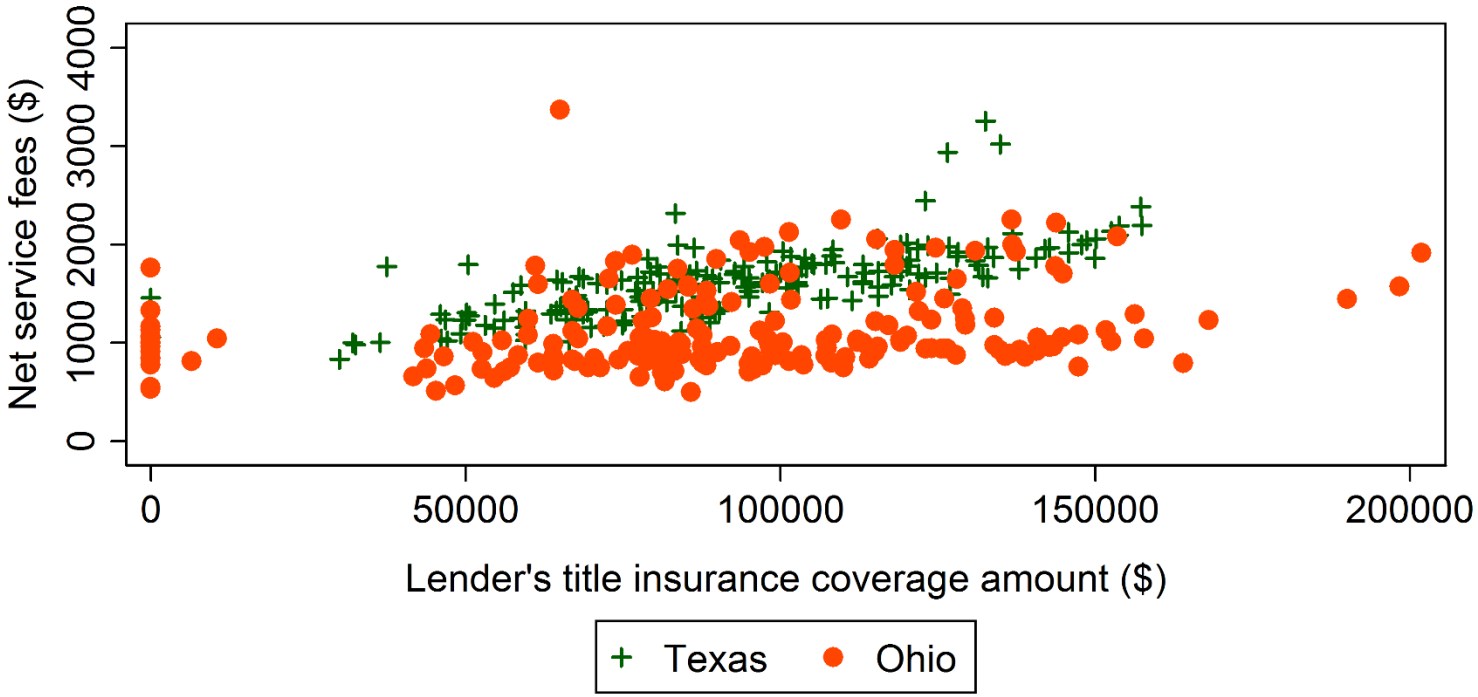
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.35 Comparison of Net Service Fees Between Texas and North Dakota



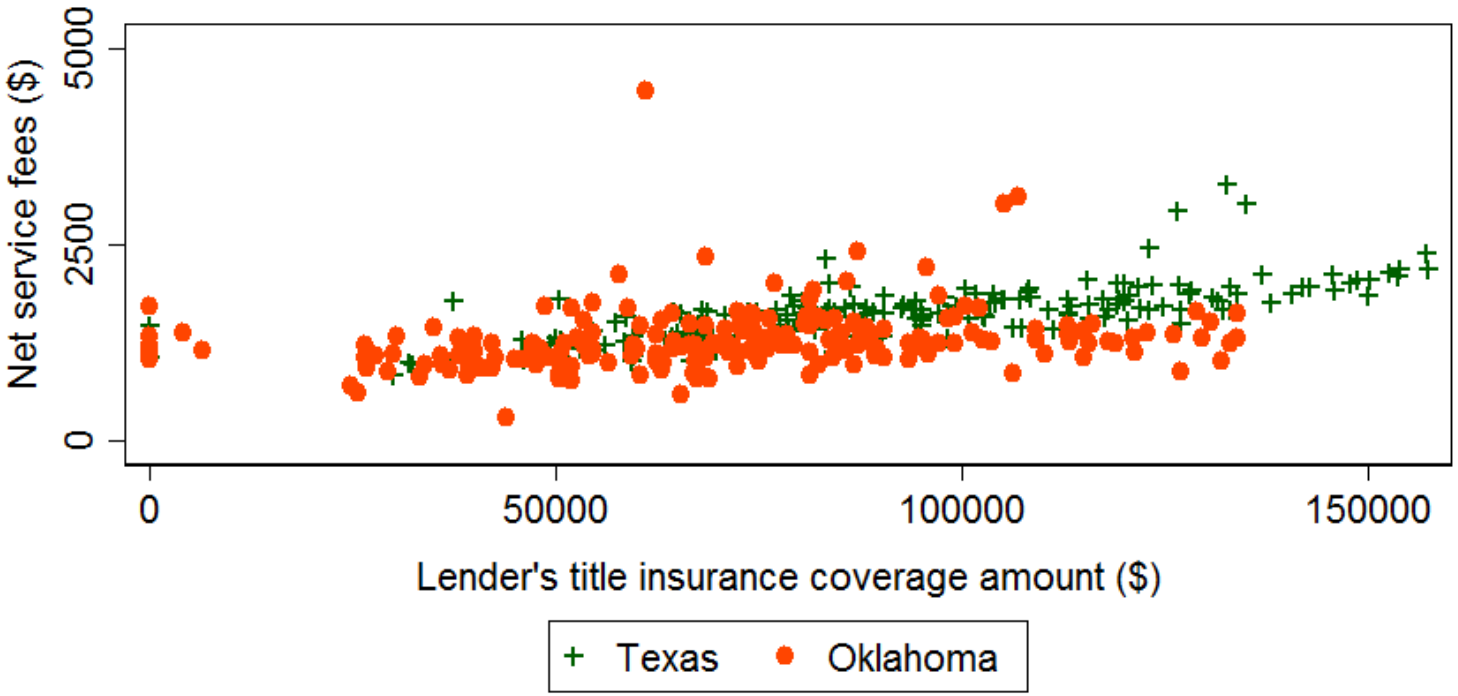
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.36 Comparison of Net Service Fees Between Texas and Ohio



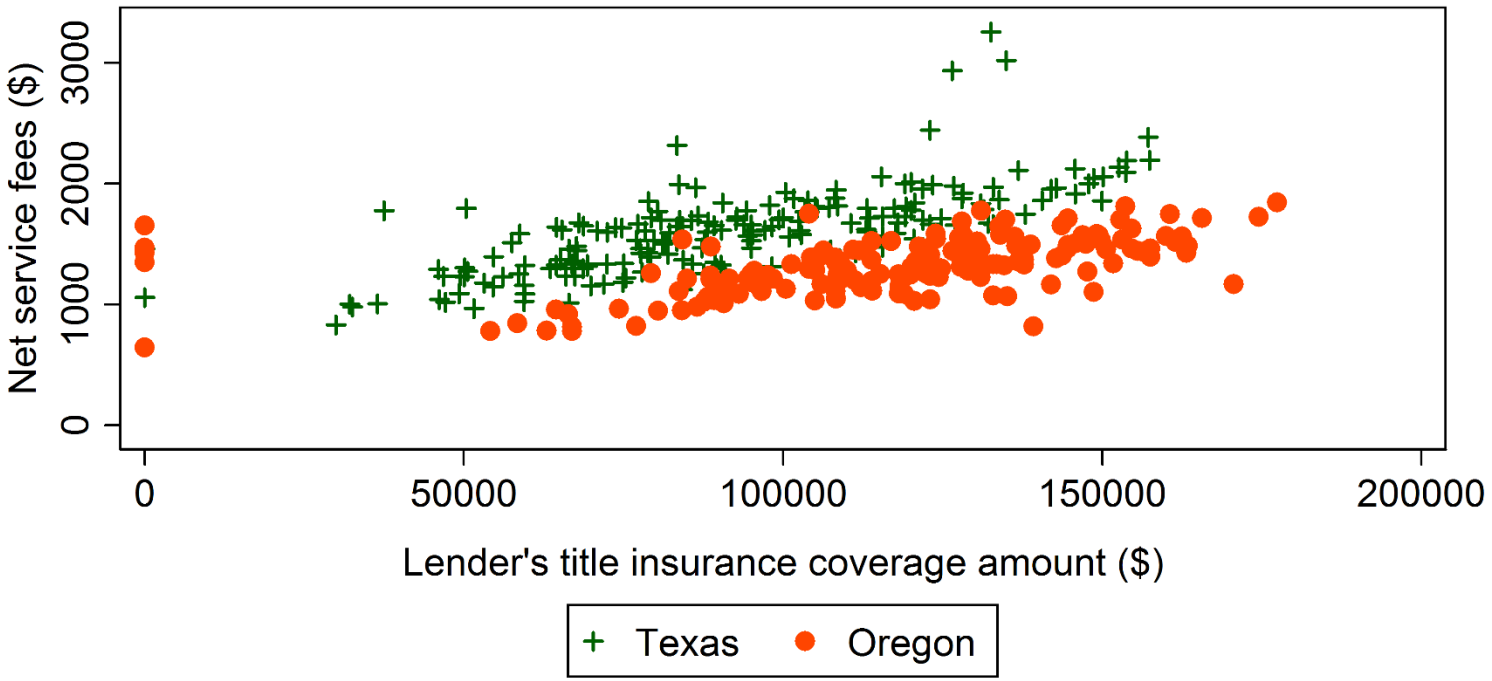
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.37 Comparison of Net Service Fees Between Texas and Oklahoma



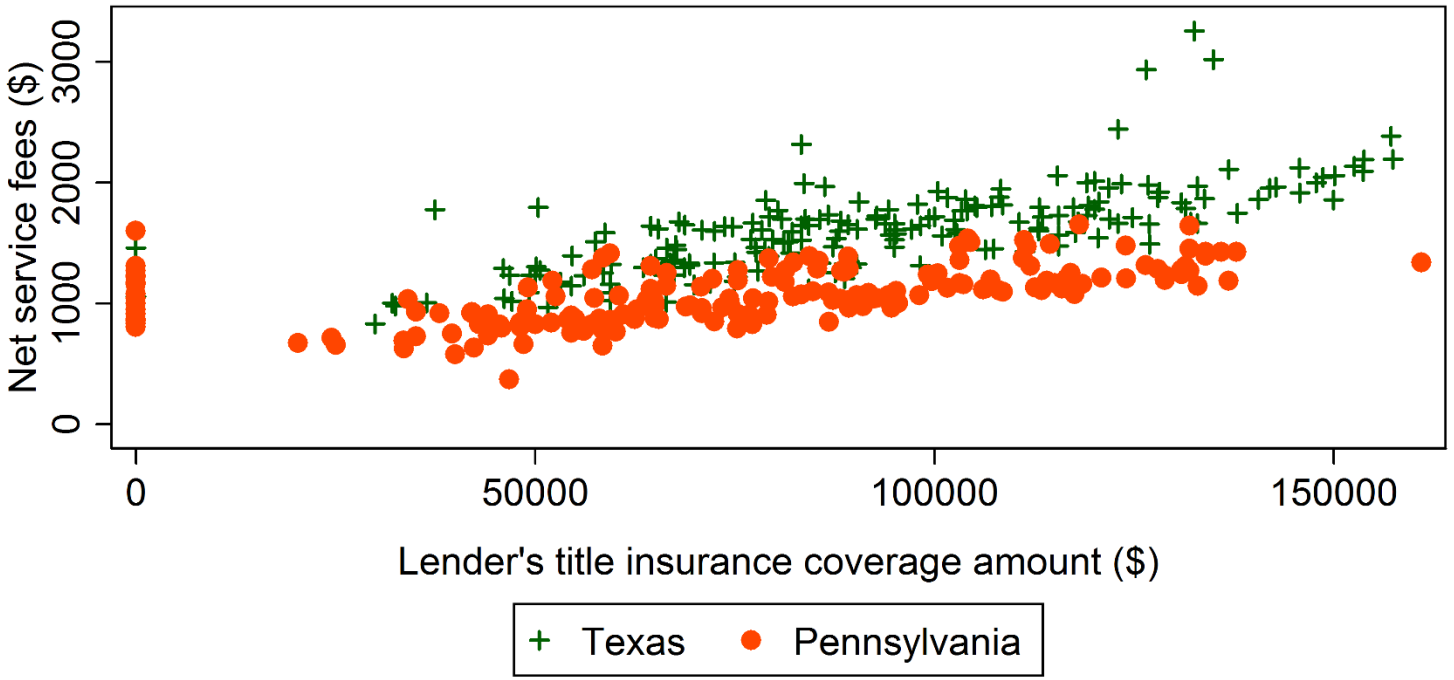
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.38 Comparison of Net Service Fees Between Texas and Oregon



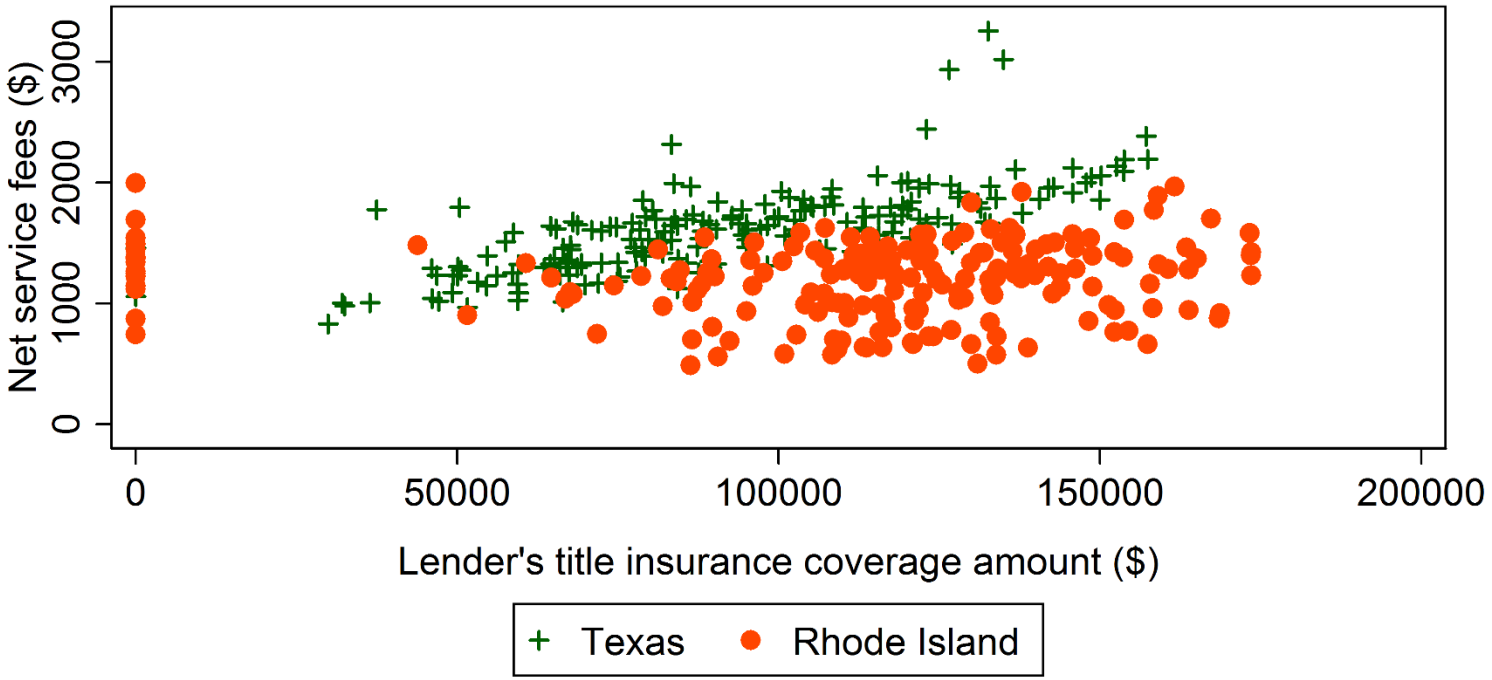
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.39 Comparison of Net Service Fees Between Texas and Pennsylvania



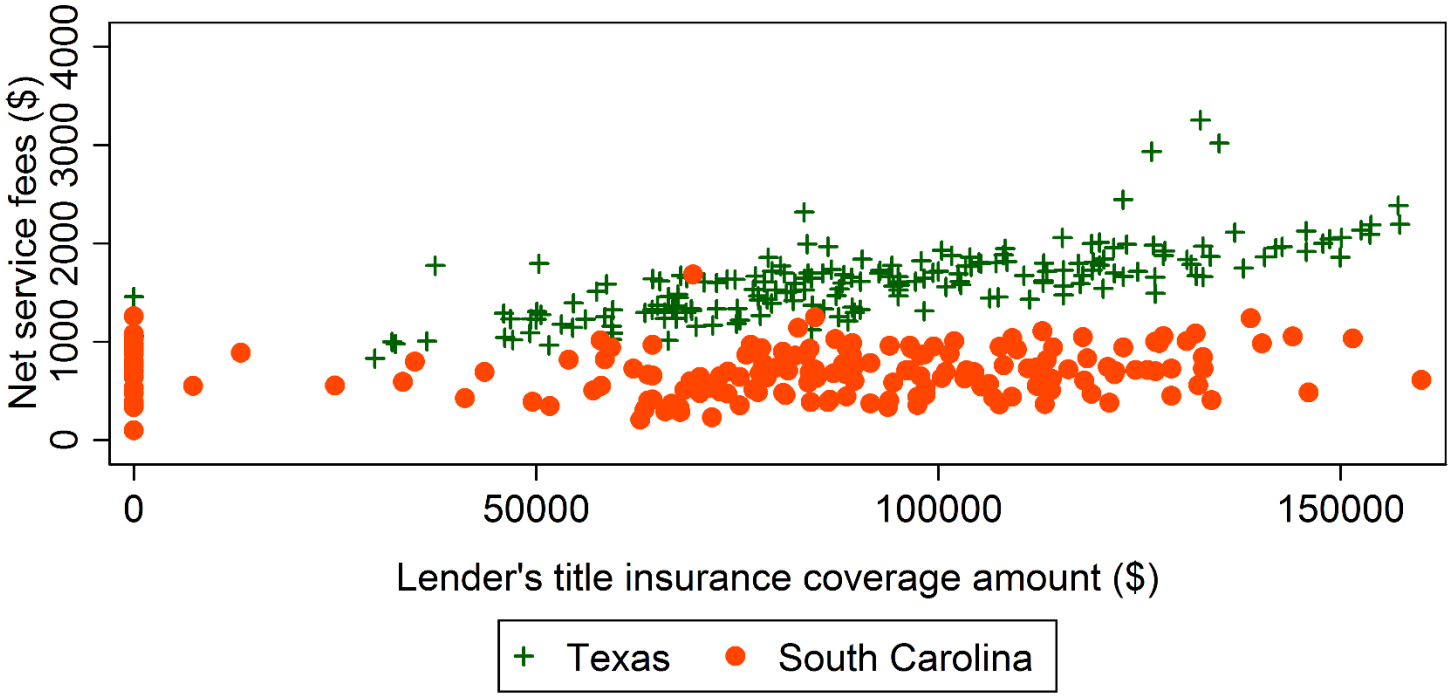
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.40 Comparison of Net Service Fees Between Texas and Rhode Island



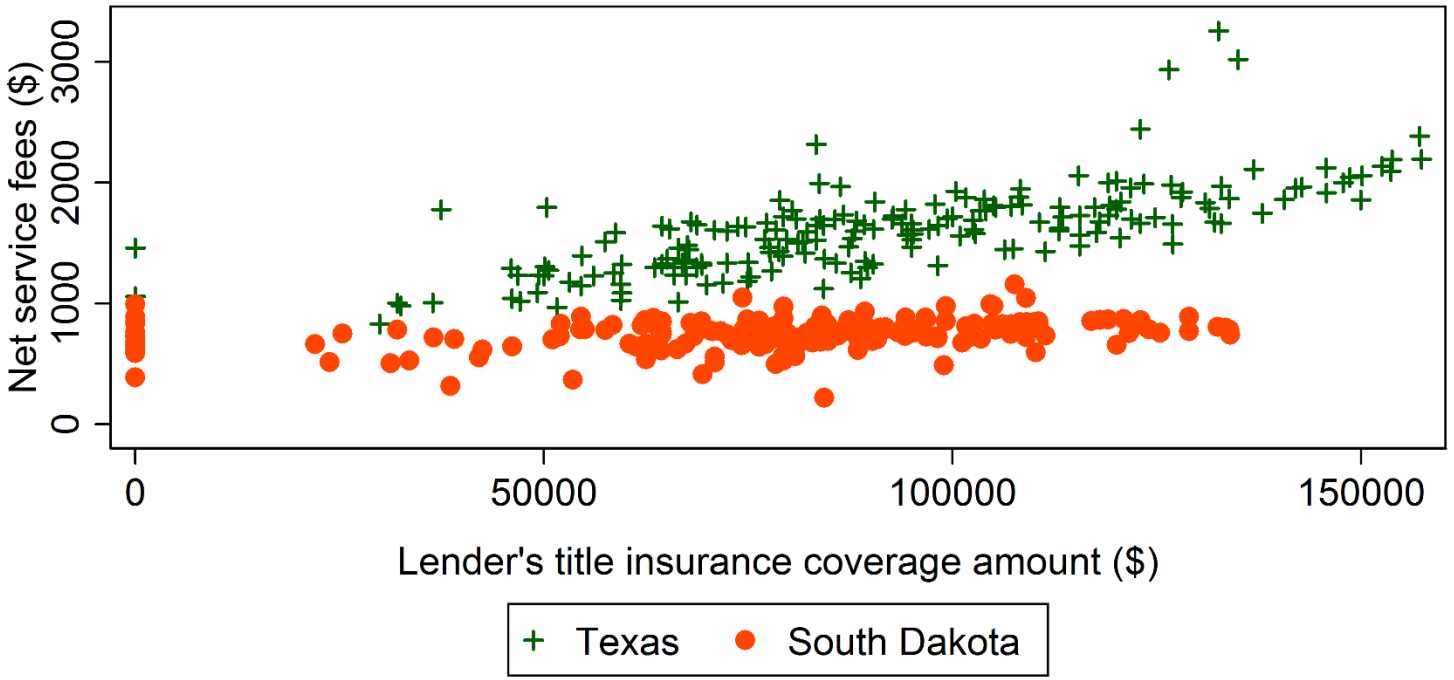
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.41 Comparison of Net Service Fees Between Texas and South Carolin



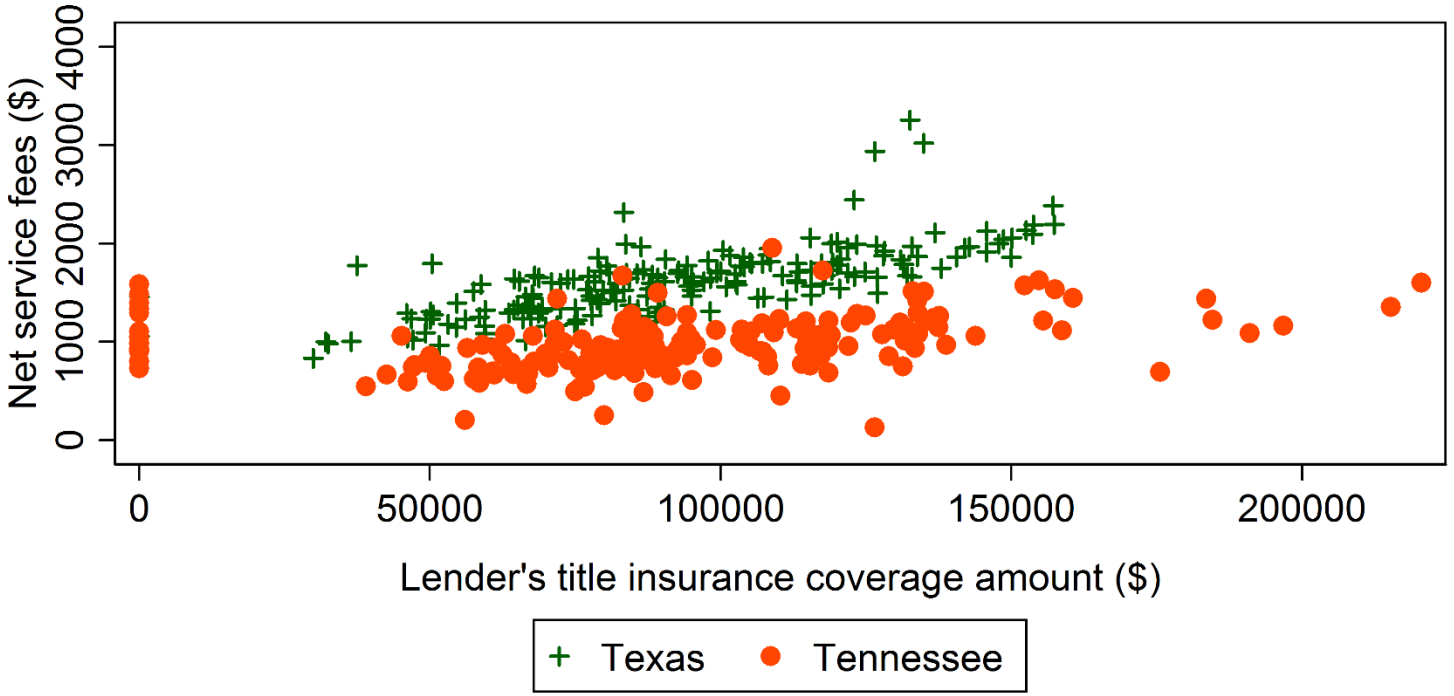
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.42 Comparison of Net Service Fees Between Texas and South Dakota



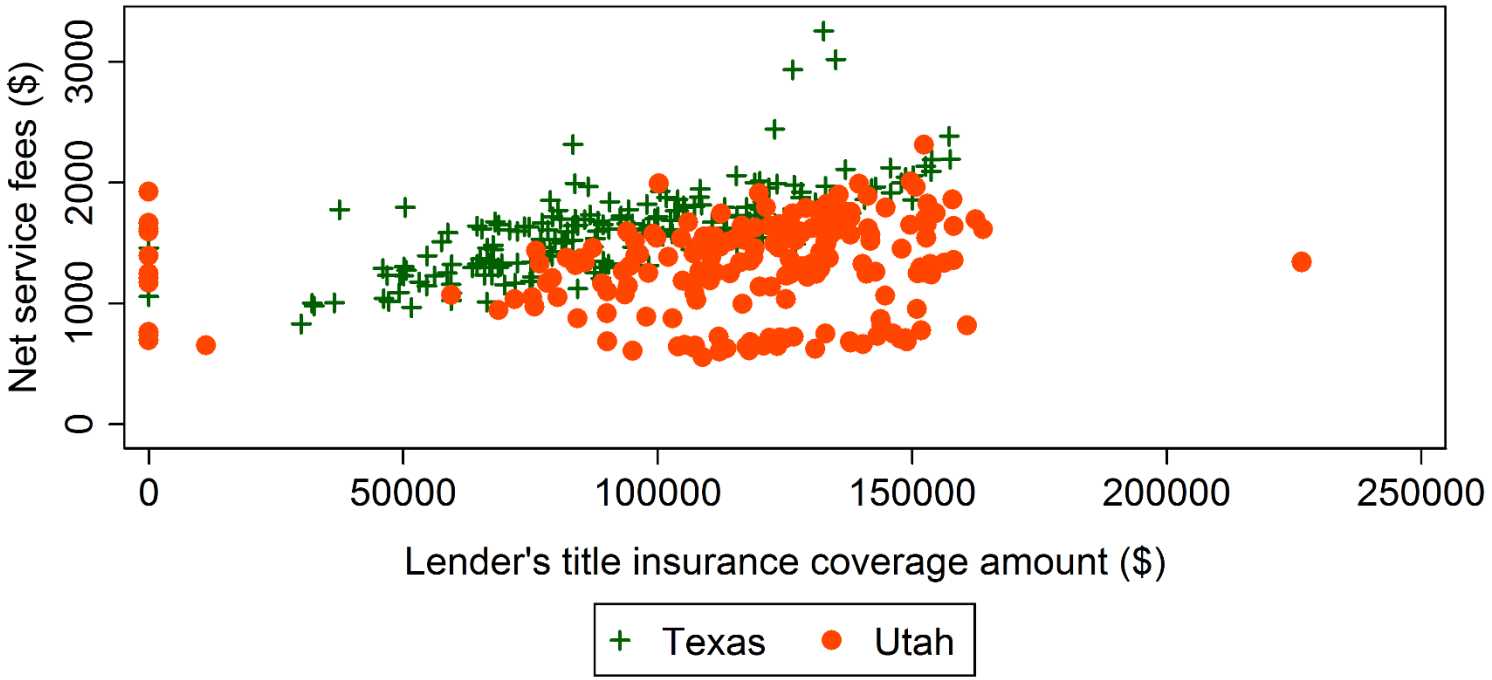
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.43 Comparison of Net Service Fees Between Texas and Tennessee



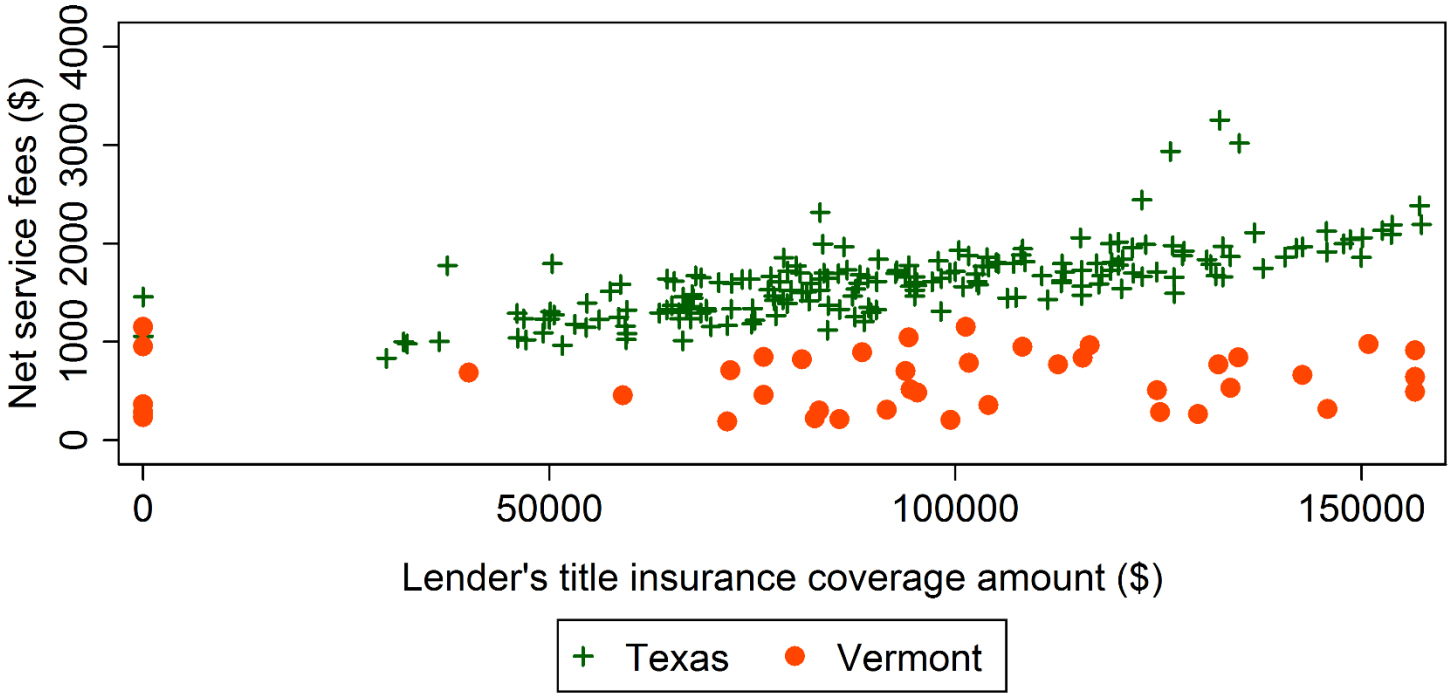
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.44 Comparison of Net Service Fees Between Texas and Utah



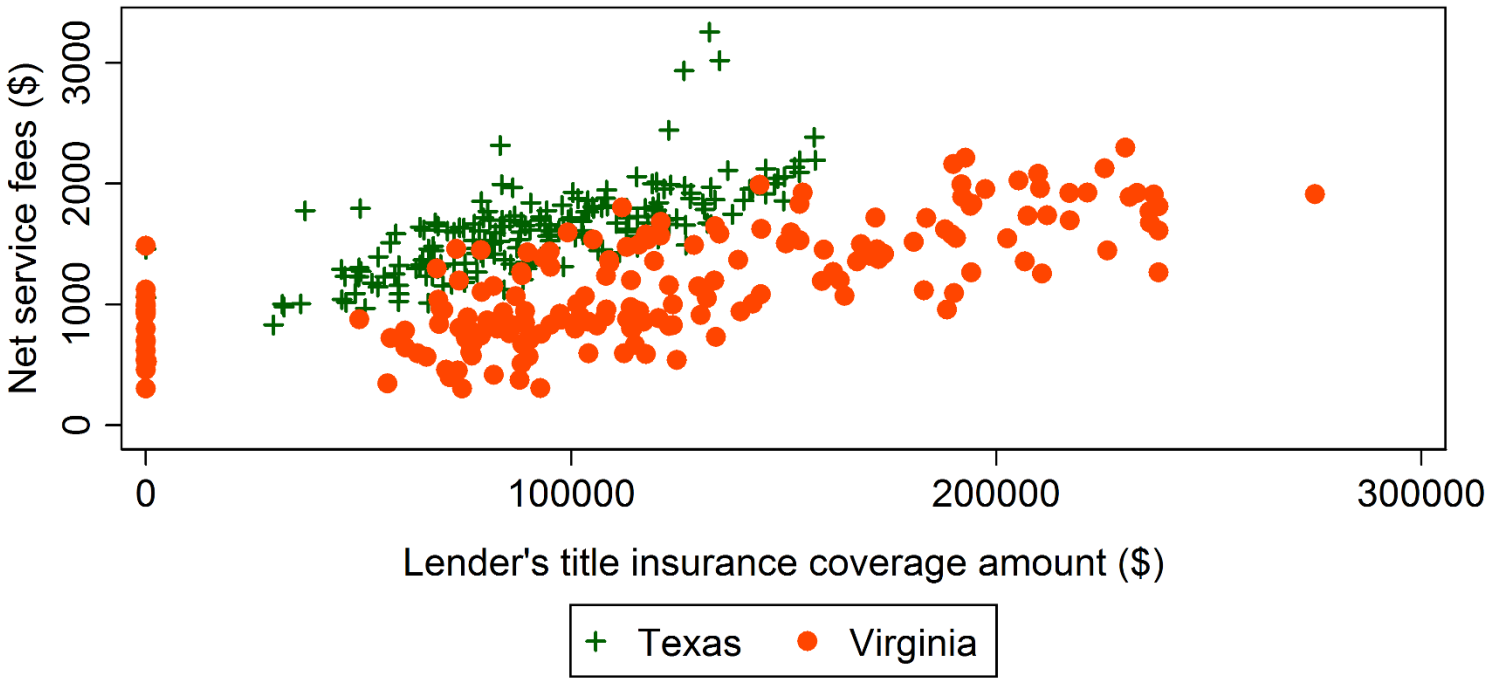
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.45 Comparison of Net Service Fees Between Texas and Vermont



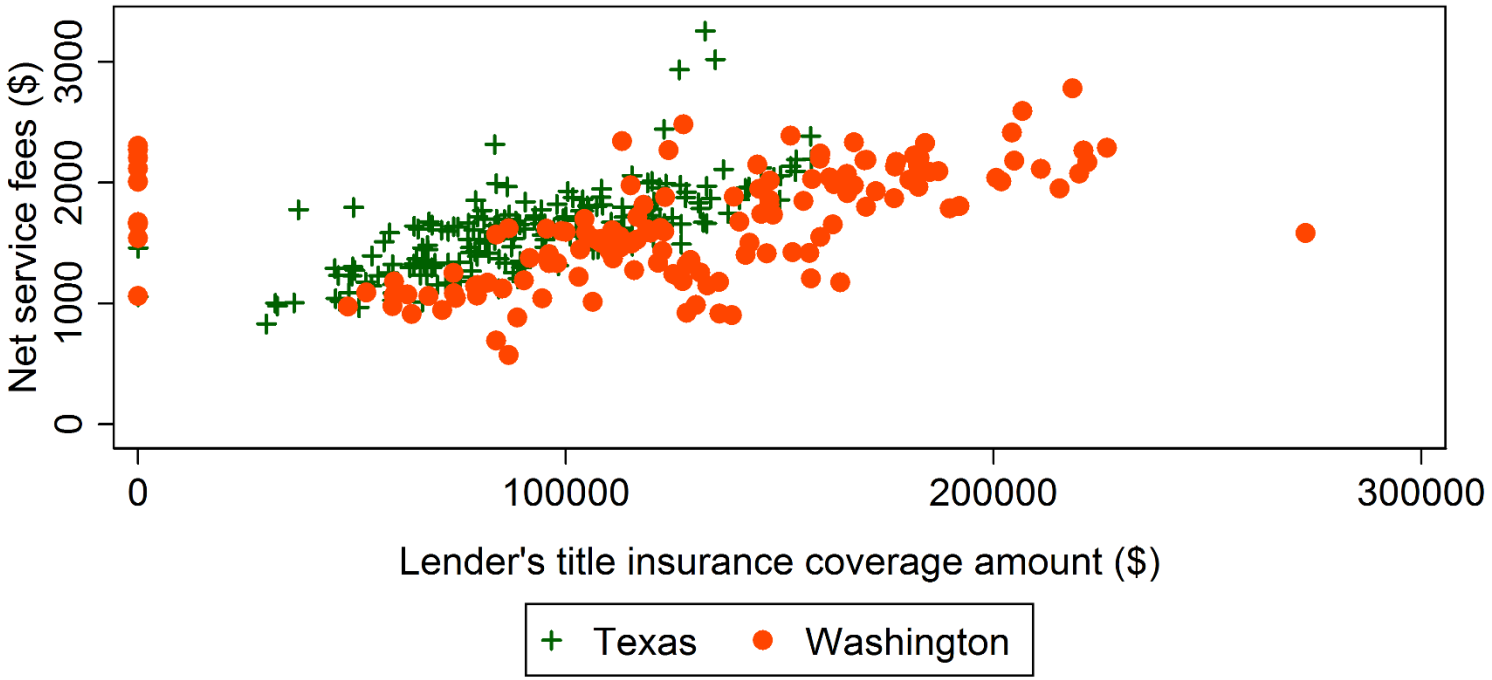
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.46 Comparison of Net Service Fees Between Texas and Virginia



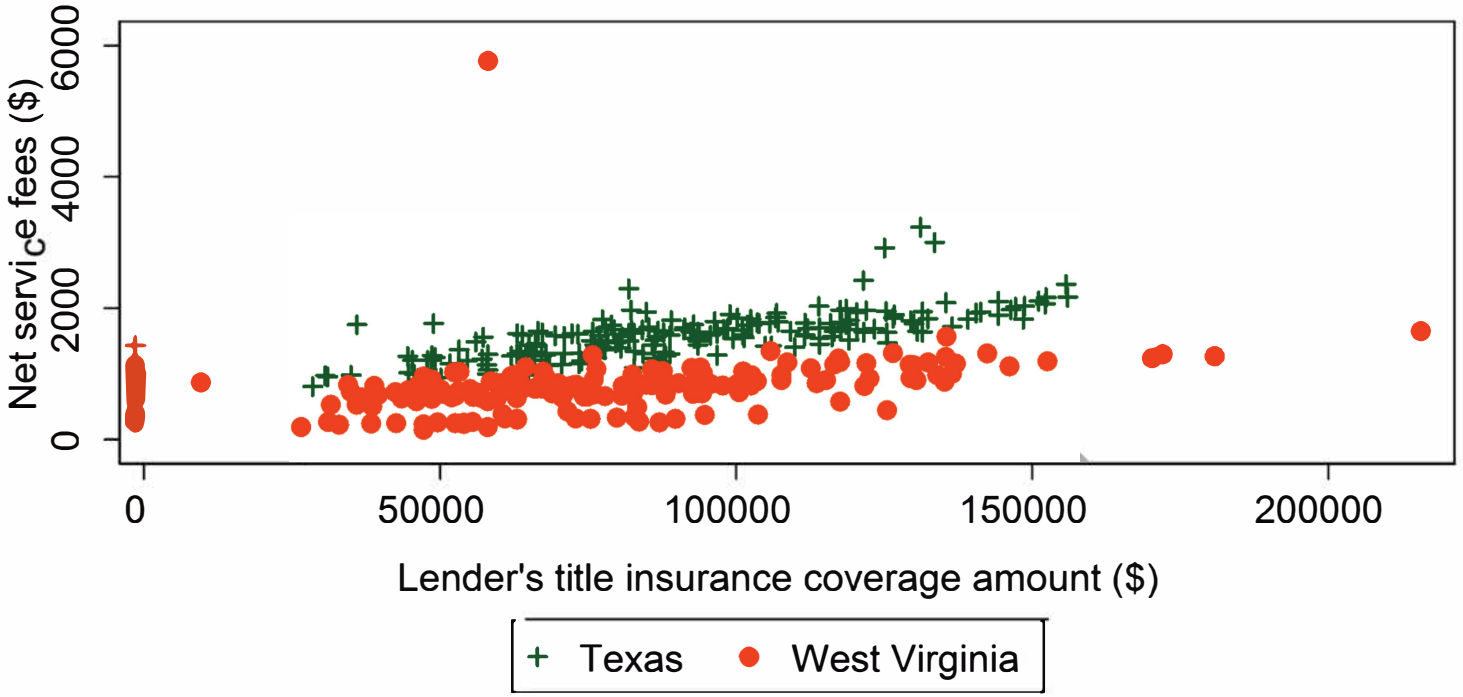
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.47 Comparison of Net Service Fees Between Texas and Washington



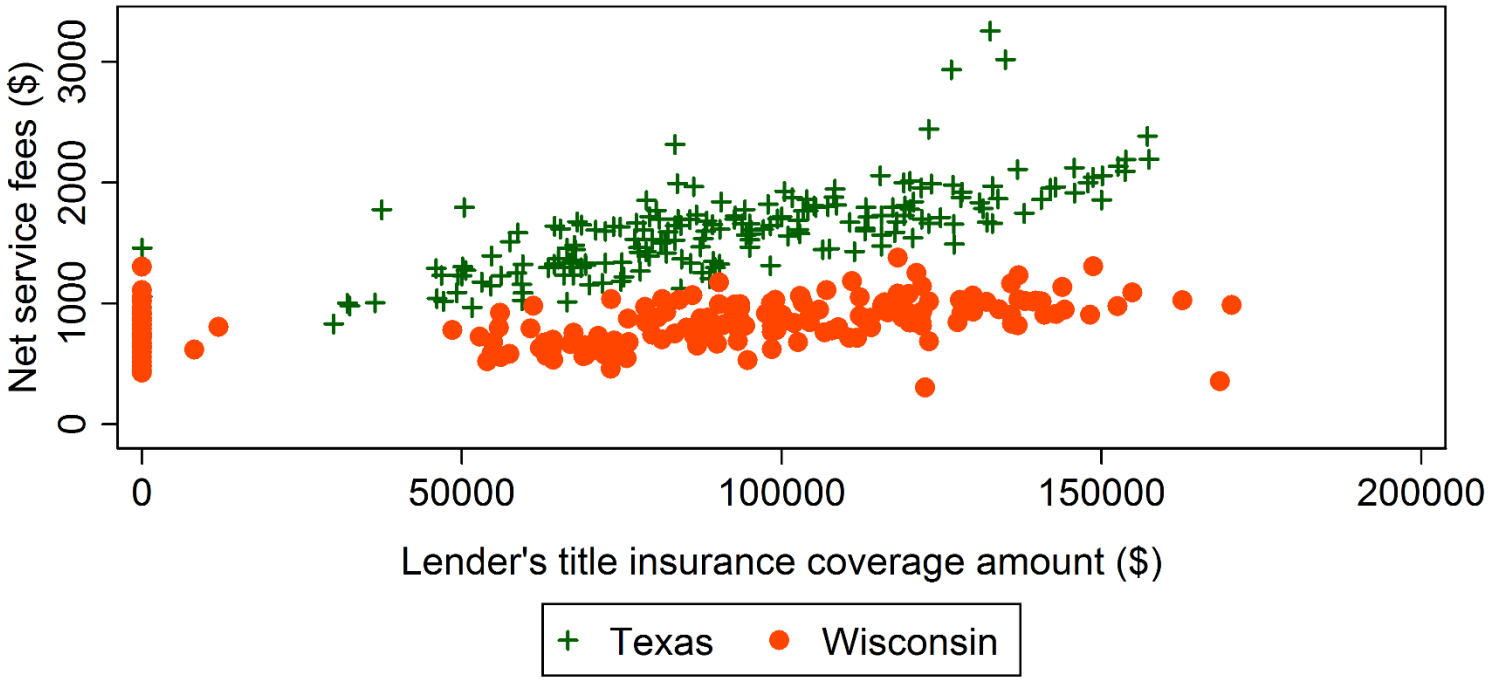
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.7.48 Comparison of Net Service Fees Between Texas and West Virginia



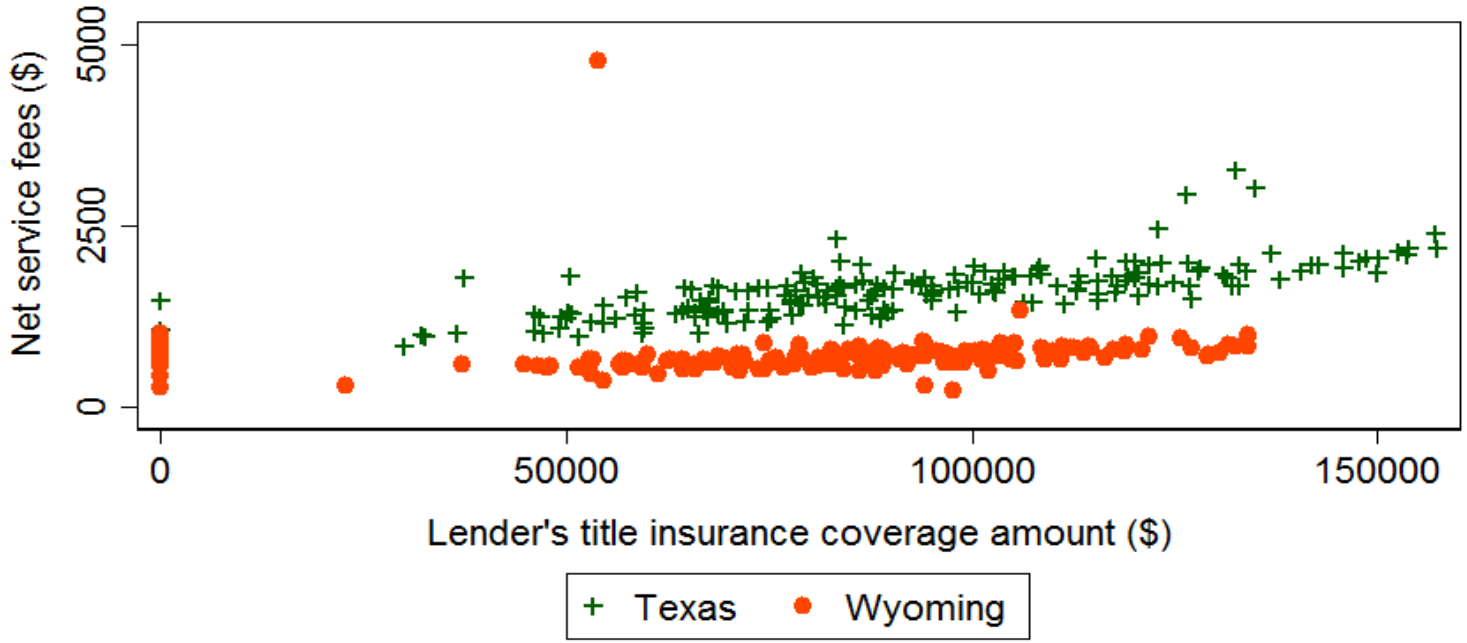
Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.49 Comparison of Net Service Fees Between Texas and Wisconsin



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database

Figure 1.9.50 Comparison of Net Service Fees Between Texas and Wyoming



Source: Graph prepared by Ms. Xue Gao based on HUD-1 database